

**2007 UPDATE TO THE STATE OF MONTANA
MULTI-HAZARD MTIGATION PLAN AND
STATEWIDE HAZARD ASSESSMENT**

APPENDIX B

DISTRICT 1 DOCUMENTATION

Meeting Sign-in Sheets
Meeting Minutes
Survey Results
Mitigation Projects

NORTHWEST MONTANA JURISDICTIONS

Deer Lodge County
Flathead County
Flathead Reservation
Granite County
Lake County
Lincoln County
Mineral County
Missoula County
Powell County
Ravalli County
Sanders County
Silver Bow County

**2007 UPDATE TO THE STATE OF MONTANA
MULTI-HAZARD MTIGATION PLAN AND
STATEWIDE HAZARD ASSESSMENT**

Meeting Sign-in Sheets

MONTANA STATE PRE-DISASTER MITIGATION PLAN UPDATE MEETING

DATE: 3/13/07 Courthouse Rm 201

LOCATION: MISSOULA - District 1

Name	Affiliation/Title	Miles Traveled Round Trip to Attend Meeting	E-mail Address or Phone No.
Daphne Digrindakis	Tetra Tech	NA	daphne.digrindakis@tetra-tech.com
KENT ATWOOD	MT- DES	NA	kentwood@mt.gov
LARRY B. AKERS	TETRA TECH	NA	alpha6@ixi.net
Jay Shaffer	MISSOULA CNTY AIRPORT AUTH.	N/A	jshaffer@mtairport.org
Art Robinson	MT DNRC - Dam Safety	300	arobinson@mt.gov
Byron Van Alstou	Arlee Fire Department	54	KV3051@blackfoot.net
Laura Hendrix	Rowell County	102	lhendrix@rowellcounty.mt.gov
Patrick O'Herren	Msia Co Rural Initiatives	1	Poherren@co.missoula.mt.us
Leanne Vreeland	Msia City Health Dept	1	vreelandloha.missoula.mt.us
CURT BELTS	MISSOULA RURAL FIRE DIST	1	Cbelts@MRFD FIRE.ORG
Jean Curtiss	Missoula County Commission		jcurtiss@co.missoula.mt.us

Meeting State Time: 9:00 AM

Meeting End Time: 11:00 am

MONTANA STATE PRE-DISASTER MITIGATION PLAN UPDATE MEETING

DATE: 3/13/07 Courthouse 201

LOCATION: Missoula - District #1

Name	Affiliation/Title	Miles Traveled Round Trip to Attend Meeting	E-mail Address or Phone No.
Colleen Toner	Red Cross - Program Specialist	Ø	toner@usa.redcross.org
Joe Behm	Red Cross - VESTA volunteer	0	BehmJ@usa.redcross.org
Peter Felsch	Warning Coordination Met/NWS	Ø	peter.felsch@noaa.gov
Deb Ogden	9-1-1 / Manager	112	dogden@co.missoula.mt.us
Jason Diehl	Missoula City Fire Dept	Ø	jdiehl@ci.missoula.mt.us
Barbara Evans	Commissioner, Missoula	Ø	—
Chase Sackey	Food + Beverage Vendor	1 block	343-4631
Dick Lewis	Missoula P.D.	1 Block	dlLewis@CI.MISSOULA.MT.US
Eddie D. Patterson, Maj.	The Salvation Army (C.O.)	1 Block	Eddie_Patterson@usa.salvationarmy.org
Bob Reid	Missoula County DES	N/A	breid@co.missoula.mt.us

Meeting Start Time: 9:00 AM

Meeting End Time: 11am

MONTANA STATE PRE-DISASTER MITIGATION PLAN UPDATE MEETING

DATE: 3/13/07

LOCATION: Polson. District 1

Name	Affiliation/Title	Miles Traveled Round Trip to Attend Meeting	E-mail Address or Phone No.
Daphne Digrindakis	Tetra Tech	300	daphne.digrindakis@tetra.tech.com
KENT ATWOOD	MT- DES	300	Katwood@mt.gov
LARRY B. AKERS	TETRA TECH	300	alpha6@ixi.net
DARRELL STAFFORD	LIB/TOOLE DES	400	swmpact@northnet.net
Carla Danielson	Lib/TOOLE DES	400	rats-brat@hotmail.com
SALLY BUCKNER	JERR CO DES	300	
Linda Connor	Fort Peck - Roosevelt Co.		
Wilfred Lambert	Fort Peck - Roosevelt Co.		
DICK CHAREST	AMERICAN Red CROSS P/R/R	232	CHARSTO@USA, RED CROSS. ORG
Robert DesRocher	Blackfoot Tribe DES	300	rdros@3rivers.net
MARC Mc Gill	LINCOLN CO.	300	LCENAC@Libby.org
PAUL SPENGLER	LAC CO DES	360	pspengler@ co.lewis-clark. mt.us

Meeting State Time: 1646

Meeting End Time:

646 pm

MONTANA STATE PRE-DISASTER MITIGATION PLAN UPDATE MEETING

DATE: 3/13/07

LOCATION: Polson

Name	Affiliation/Title	Miles Traveled Round Trip to Attend Meeting	E-mail Address or Phone No.
VALEDA VANDERSANDE	RSVP / CERT	2	883-0832
WAYNE VANDERSANDE	RSVP / CERT	2	883-0832
Chris Spencer	Ft. Belknap Trikes	400	353-3221
CLETE GREGORY	Pondera Co / Dep DES	550	271-3138
Sheri Lanz	MT DES	340	841-3911
Richard A. Burrows	Liberty County	320	759-5171
Ed Auker	Big Horn	920	665-1731
BART BONNEY	GRANITE Co. DES	340	563-3266
Jolene Jacobson	CERT DES	20	
Stephen Stanley	Lehr CO ODEM	15	883-7253
Mark Peck	Flathead County	100	758-5558
MARC McGill	LINCOLN Co.	300	293-6295 / LCemaclibby.org

Meeting State Time: 1646

Meeting End Time: 646 pm

MONTANA STATE PRE-DISASTER MITIGATION PLAN UPDATE MEETING

DATE: 3/13/07

LOCATION: POLSON, DISTRICT 1

Name	Affiliation/Title	Miles Traveled Round Trip to Attend Meeting	E-mail Address or Phone No.
Charlie Hanson	MT DES - DS Rep	800	desdist5@internet
MARTHA SMITH	MT-DES - DIST ^{ONE} REP	—	marvsmith@mt.gov
Bill Margel	Landau Co OEM	186	sandercooem@metnet.gov
Bill Colwell	Mt. RFD	130	brdwell@mtfire.org
EARL Hall	UM	140	earl.hall@umontana.edu

Meeting State Time: 1646

Meeting End Time: 646 pm

**2007 UPDATE TO THE STATE OF MONTANA
MULTI-HAZARD MTIGATION PLAN AND
STATEWIDE HAZARD ASSESSMENT**

Meeting Minutes

**UPDATE TO THE STATE OF MONTANA PDM
PLAN AND HAZARD ASSESSMENT
PUBLIC MEETING MINUTES**

Date: Tuesday, March 13, 2007

Time: 9:09 am – 11:00 am

Place: Room 201 of the Missoula County Courthouse, Montana

Meeting Attendance:

Jay Shaffer, Missoula County Airport Authority
Art Robinson, MT DNRC Dam Safety
Byron Van Alsten, Arlee Fire Department
Laura Hendrix, Ravalli County
Patrick O'Herren, Missoula County Rural Initiatives
Leanne Vreeland, Missoula County Health Department
Curt Belts, Missoula Rural Fire District
Jean Curtiss, Missoula County Commissioner
Colleen Tone, Red Cross Program Specialist
Joe Brehm, Red Cross VISTA Volunteer
Peter Felsch, Warning Coordinator MET/NWS
Deb Ogden, 911- Manager
Jason Diehl, Missoula City Fire Department
Barbara Gram, Missoula County Commissioner
Chase Sackey, Food and Beverage Vender
Dick Lewis, Missoula Police Department
Major Eddie D. Patterson, The Salvation Army (CO)
Bob Reid, Missoula County DES
Kent Atwood, State of Montana – DES
Larry Akers, Contractor
Daphne Digrindakis, Contractor

HAZARDS AFFECTING DISTRICT 1

Meeting Discussion on Hazards Affecting District 1

Possible addition of Communicable Disease hazard. It was noted that bird flu, measles, SARS, livestock diseases, etc. could impact the county's economy for up to six months. If people operating the infrastructure were stricken by disease, services could fail.

ASSESSMENT OF HAZARDS – DISTRICT 1

Drought

Lincoln – Not Assessed
Flathead – Low
Sanders – Low
Lake – Low

Mineral – Not Assessed
Missoula – Change from Not Assessed to High
Ravalli – Not Assessed
Granite – Medium
Powell – Low
Deer Lodge – High
Silver Bow – Medium
Flathead Reservation – Low

Missoula County requested an upgrade to high risk due to the increasing number of subdivisions, low snow packs and climate change. Wildfire, drought and flooding were named as the top three hazards in Missoula County.

Earthquake

Lincoln – Low
Flathead – Low
Sanders – Low
Lake – Low
Mineral – Low
Missoula – Change from Low to Medium
Ravalli – Low
Granite – Medium
Powell – Low
Deer Lodge – Low
Silver Bow – Low
Flathead Reservation - Low

Missoula County noted that their risk for earthquake is elevated due to their position on a fault line. The County also expressed concern over possibly failure of the Jocko lakes earthen dams. Additionally, the County is the economic center for the area and critical structures (like hospitals) need to be protected from seismic activity.

Flood

Lincoln – Medium
Flathead – Medium
Sanders – Low
Lake – Low
Mineral – Medium
Missoula – Change from Medium to High
Ravalli – Change from Medium to High
Granite – High
Powell – High
Deer Lodge – High
Silver Bow – Medium
Flathead Reservation – Low

Missoula County felt this hazard should be upgraded to high as global warming will probably change the climate. Ravalli County also requested their risk be upgraded to high as there are a large number of high hazard dams in the county.

Hazardous Material Incident

Lincoln – Medium
Flathead – Medium
Sanders – Not Assessed
Lake – Medium
Mineral – Medium
Missoula – Change from Not Assessed to High
Ravalli – Change from Not Assessed to Medium
Granite – Medium
Powell – Low
Deer Lodge –Medium
Silver Bow - Medium
Flathead Reservation – Low

Missoula County requested this risk be upgraded to high as many trains and hazardous materials move through the county. An observation of hazmat placards on rail cars and interstate vehicles identified a rough count of eight per hour.

Ravalli noted that their risk for a Hazardous Material Incident should be upgraded to medium. The Rocky Mountain Laboratory is located in the county and about one train per week passes through the area. Arlington was also noted as a chokepoint.

Landslide

Lincoln – Low
Flathead – Low
Sanders – Not Assessed
Lake – Not Assessed
Mineral – Medium
Missoula – Medium
Ravalli – Medium
Granite – Low
Powell – Low
Deer Lodge – Low
Silver Bow – Low
Flathead Reservation – Not Assessed

Missoula and Ravalli counties did not request any risk changes; however, they noted that many roads are poorly cut. This leads to more water runoff which leads to landslides. The steeply cut Highway 83 by Salmon Lake was cited as an example of this condition. Landslides are occurring near the highway.

Severe Thunderstorm, Hail, Wind and Tornadoes

Lincoln – Low
Flathead – Medium
Sanders – High
Lake – High
Mineral – High
Missoula – High
Ravalli – High
Granite – Medium
Powell – Low
Deer Lodge – Medium
Silver Bow – Medium
Flathead Reservation – Low

Missoula and Ravalli counties are both rated as high risk for Severe Thunderstorms, Hail, Wind and Tornadoes. It was noted that mini twisters are occurring in the area.

Terrorism and Violence

Lincoln – Low
Flathead – Low
Sanders – Medium
Lake – Medium
Mineral – Not Assessed
Missoula – Change from Not Assessed to Medium
Ravalli – Change from Not Assessed to Medium
Granite – Low
Powell – Low
Deer Lodge – Low
Silver Bow – Low
Flathead Reservation – Not Assessed

Missoula County requested the risk be upgraded to medium for this hazard, particularly for bioterrorism. Participants noted that the University acts as a lightning rod for bioterrorism activities. Additionally, the counter culture element, in the north part of the County, and the Ruckus Society in Missoula could be a threat based on past occurrences. Sporting events are also considered to be an opportunity for violence.

Ravalli County also felt that they were at a medium risk for Terrorism and Violence.

Volcanic Eruption

Lincoln – Not Assessed
Flathead – Not Assessed
Sanders – Not Assessed
Lake – Not Assessed
Mineral – Low
Missoula – Low
Ravalli – Low

Granite – Low
Powell – Not Assessed
Deer Lodge – Low
Silver Bow – Low
Flathead Reservation – Not Assessed

Both Missoula and Ravalli counties rated their risk for the Volcanic Eruption hazard as low and no changes are necessary.

Wildfire

Lincoln – High
Flathead – High
Sanders – Not Assessed
Lake – High
Mineral – Medium
Missoula – Change from Medium to High
Ravalli – Change from Medium to High
Granite – High
Powell – Not Assessed
Deer Lodge – High
Silver Bow - Medium
Flathead Reservation – High

Missoula and Ravalli counties noted that their risk for Wildfire should be upgraded from medium to high.

Winterstorm

Lincoln – Medium
Flathead – High
Sanders – High
Lake – High
Mineral – High
Missoula – High
Ravalli – High
Granite – Medium
Powell – Low
Deer Lodge –Medium
Silver Bow - High
Flathead Reservation - Low

Some participants felt that the threat from Winterstorms would decrease with global warming, except at high elevations. Others in the audience disagreed and identified rain on snow events as a significant factor for flooding in both counties.

ASSESSMENT OF STATE GOALS – DISTRICT 1

Goal 1: Maximize the use of mitigation actions that prevent losses from all hazards.

Goal 2: Increase State's capability to provide mitigation opportunities.

Goal 3: Mitigate the potential loss of life and property from flooding.

Missoula County noted that removal of the Milltown Dam would change inundation areas of the mostly private downstream dams below. Consequently, private dam owners would need to update. Additionally, the priority rating of the mitigation project that concerned the adoption of regulations that enforced no-build zones in floodplains and flood prone zones should be upgraded from moderate to high.

Ravalli County has not finished the stream mapping project (only Bitterroot is mapped) and the priority remains high. The priority for the project that identifies critical access bridges should be changed from moderate to high.

Goal 4: Reduce the community impacts of wildland and rangeland fires.

Missoula County has finished the mitigation projects that concern mapping of heavy fuel areas and completion of the CWPP.

Goal 5: Reduce potential earthquake losses in Western Montana.

No projects listed for Missoula or Ravalli counties.

Goal 6: Minimize economic impacts of drought.

Goal 7: Reduce impacts from severe winter weather.

No projects listed for Missoula or Ravalli counties.

Goal 8: Encourage mitigation of potentially devastating but historically less frequent hazards.

No projects listed for Missoula or Ravalli counties.

OTHER COMMENTS

Participants inquired if the DNRC could provide funding for dam failure early warning systems. Under certain circumstances, funding is available.

Missoula County inquired if there was a program that the State could enforce that helped counties prevent building in the floodplains and Wildland Urban Interface.

Missoula and Ravalli counties also felt state goals 3 (flood) and 4 (wildfire) should receive a higher priority and possibly be grouped together. Hazardous Material Incidents should also be grouped with high risk hazards. It was suggested that all other hazards be grouped together under Goal 8.

**UPDATE TO THE STATE OF MONTANA PDM
PLAN AND HAZARD ASSESSMENT
PUBLIC MEETING MINUTES**

Date: Monday, March 13, 2007

Time: 4:46 pm – 6:46 pm

Place: Polson, Montana

Meeting Attendance:

Valeda VanDerSande, RSVP/CERT
Wayne VanDerSande, RSVP/CERT
Avis Spencer, Ft. Belknap Tribes
Clete Gregory, Pondera County DES
Sheri Lanz, MT DES
Richard A. Burrows, Liberty County
Ed Auker, Big Horn
Bart Bonney, Granite County DES
Jolene Jacobson, CSRT DES
Stephen Stanley, Lake County OTEM
Mark Peck, Flathead County
Marc McGill, Lincoln County
Charlie Hanson, MT DES District 5 Rep
Martha Smith, MT DES District 1 Rep
Bill Volgel, Sanders County OEM
Bill Colwall, Missoula Rural Fire District
Earl Hall, University of Montana
Darell Stafford, Liberty County/Toole County DES
Carla Danielson, Liberty County/Toole County DES
Sally Buckles, Jefferson County DES
Linda Connor, Fort Peck - Roosevelt County
Wilfred Lambert, Fort Peck - Roosevelt County
Dick Charest, American Red Cross R/R/R
Robert DesRosier, Blackfeet Tribe DES
Marc McGill, Lincoln County
Paul Spengler, Lewis and Clark County DES
Kent Atwood, State of Montana – DES
Larry Akers, Contractor
Daphne Digrindakis, Contractor

ASSESSMENT OF HAZARDS

Drought

Big Horn – High

Carter – High

Blackfeet Reservation – Change from Medium to High

Participants noted that drought should be rated higher in a couple counties and the Blackfeet Reservation. It was inquired if the BIA would buy into the State PDM Plan and a suggestion was made to invite this agency to the April 19th stakeholder meetings in Helena. It was also observed that the perception of drought risk has changed over time.

Earthquake

Lincoln – Change from Low to Medium
Flathead – Change from Low to Medium
Sanders – Change from Low to Medium
Lake – Change from Low to Medium
Mineral – Change from Low to Medium
Missoula – Medium
Ravalli – Change from Low to Medium
Granite – Medium
Powell – Change from Low to Medium
Deer Lodge – Change from Low to Medium
Silver Bow - Change from Low to Medium
Lewis & Clark – Change from Medium to High
Flathead Reservation - Change from Low to Medium

District 1 was observed to have overall low risk ratings for the earthquake hazard and it was suggested that this should be reconsidered. Participants suggested that other hazards, like severe weather, are a higher risk to the population. People are apathetic to earthquakes because they occur infrequently. It was suggested that the earthquake hazard be reviewed at the stakeholders meeting in April.

Flood

Lincoln – Change from Medium to High
Missoula – High
Pondera – Change from High to Medium

Participants observed that counties in District 1 have low, medium and high risk for flooding. Lincoln County had a long period without flooding but will update the risk as flooding has recently occurred. Pondera County had a major flood in 1964; however, the threat of flood is not high anymore and the risk should be considered medium. Most of the state shows that local plans have a high risk for flood.

Hazardous Material Incident

Lewis & Clark – Change from Low to Medium
Missoula – High
Sanders – Change from Medium to High
Mineral - Change from Medium to High
Fort Peck Reservation - Change from Medium to High
Flathead Reservation – Change from Low to Medium
Glacier – Change from Not Assessed to Medium

It was observed that some local plans only considered natural hazards and that some recent plans have included the Hazardous Material Incident hazard. Participants noted that Lewis & Clark should be upgraded to medium risk and Sanders, Missoula and Mineral counties should be upgraded to high risk. The Fort Peck Reservation should also be at high risk as oil wells have contaminated water supplies. It was also observed that in Cascade County, Malmstrom has a hazmat collection system that needs to be considered. However, the Cascade County PDM is incomplete and hasn't been submitted to the state. It was suggested that the State PDM Plan overlay transportation corridors onto the HAZMAT hazard map to identify high areas of risk. It was also noted that Lake County and the Flathead Reservation should have the same hazard risks as they occupy the same territory. The same was said of the Blackfeet Reservation and Glacier County.

Landslide

Lincoln – Change from Low to Medium
Flathead – Change from Low to Medium
Big Horn – Medium
Lake – Change from Not Assessed to Medium
Sanders – Change from Not Assessed to Medium

Participants felt that Lincoln, Big Horn, Flathead, Lake and Sanders counties should be upgraded to medium risk. It was noted that a landslide into Big Horn Lake could cause a large seiche and/or dam failure.

Severe Thunderstorms, Hail, Wind and Tornadoes

Lincoln – Change from Low to High
Flathead – Change from Medium to High
Fort Belknap Reservation - Change from Low to High

Participants discussed the need to upgrade the risk for Lincoln and Flathead counties and the Fort Belknap Reservation to high.

Terrorism and Violence

No change.

Volcanic Eruption

No change, but it was noted that ashfall from Cascades is still a hazard.

Wildfire

It was noted that entire state should be classified as high hazard.

Winterstorms

Lewis & Clark – Change from Low to Medium
Lincoln – Change from Medium to High

Changes were suggested for Lewis & Clark and Lincoln counties.

ASSESSMENT OF STATE GOALS

Goal 1: Maximize the use of mitigation actions that prevent losses from all hazards.

Goal 2: Increase State's capability to provide mitigation opportunities.

Goal 3: Mitigate the potential loss of life and property from flooding.

Goal 4: Reduce the community impacts of wildland and rangeland fires.

The counties felt that more money should be spent on wildfire than flooding. Additionally, drought should be associated with wildfire hazard and wildfire associated with drought hazard.

Goal 5: Reduce potential earthquake losses in Western Montana.

Goal 6: Minimize economic impacts of drought.

Goal 7: Reduce impacts from severe winter weather.

Goal 8: Encourage mitigation of potentially devastating but historically less frequent hazards.

Counties felt that Hazardous Materials Incident should be a separate goal. The state legislature does not properly support state HAZMAT teams. The hazards grouped together under this goal should be separate if they are considered to be high risk. Severe Thunderstorms, Hail, Wind and Tornadoes should also be a separate hazard.

OTHER COMMENTS

The money spent for response and recovery should consider goal priority.

Goal should be correlated with risk rating.

**2007 UPDATE TO THE STATE OF MONTANA
MULTI-HAZARD MTIGATION PLAN AND
STATEWIDE HAZARD ASSESSMENT**

On-Line Survey Results

What jurisdiction type do you represent?			
		Response Percent	Response Count
Federal	<div><div></div></div>	12.1%	4
State	<div><div></div></div>	3.0%	1
County	<div><div></div></div>	42.4%	14
Tribal	<div><div></div></div>	3.0%	1
Public Utility	<div><div></div></div>	12.1%	4
General Public	<div><div></div></div>	12.1%	4
Other (please specify)	<div><div></div></div>	30.3%	10
		answered question	33
		skipped question	0

What County/Tribal Community do you represent or as a private citizen where do you live?			
		Response Percent	Response Count
Blackfeet		0.0%	0
Crow		0.0%	0
Flathead	<div><div></div></div>	9.1%	3
Fort Belknap		0.0%	0
Fort Peck		0.0%	0
Northern Cheyenne		0.0%	0
Rocky Boy's		0.0%	0
Beaverhead		0.0%	0
Big Horn		0.0%	0
Blaine		0.0%	0
Broadwater		0.0%	0
Carbon		0.0%	0
Carter		0.0%	0
Cascade		0.0%	0
Chouteau		0.0%	0

State of Montana Multi-Hazard Mitigation Plan and Statewide Hazard Assessment

Custer		0.0%	0
Daniels		0.0%	0
Dawson		0.0%	0
Deer Lodge		3.0%	1
Fallon		0.0%	0
Fergus		0.0%	0
Flathead		6.1%	2
Gallatin		0.0%	0
Garfield		0.0%	0
Glacier		0.0%	0
Golden Valley		0.0%	0
Granite		0.0%	0
Hill		0.0%	0
Jefferson		0.0%	0
Judith Basin		0.0%	0
Lake		3.0%	1
Lewis And Clark		0.0%	0
Liberty		0.0%	0
Lincoln		3.0%	1
Madison		0.0%	0
McCone		0.0%	0
Meagher		0.0%	0
Mineral		0.0%	0
Missoula		27.3%	9
Musselshell		0.0%	0
Park		0.0%	0
Petroleum		0.0%	0
Phillips		0.0%	0
Pondera		0.0%	0
Powder River		0.0%	0
Powell		0.0%	0

Prairie		0.0%	0
Ravalli	<div></div>	48.5%	16
Richland		0.0%	0
Roosevelt		0.0%	0
Rosebud		0.0%	0
Sanders		0.0%	0
Sheridan		0.0%	0
Silver Bow		0.0%	0
Stillwater		0.0%	0
Sweet Grass		0.0%	0
Teton		0.0%	0
Toole		0.0%	0
Treasure		0.0%	0
Valley		0.0%	0
Wheatland		0.0%	0
Wibaux		0.0%	0
Yellowstone		0.0%	0
Other		0.0%	0
	answered question		33
	skipped question		0

Have you seen or read the State of Montana Multi-Hazard Mitigation Plan and Statewide Hazard Assessment.			
		Response Percent	Response Count
Yes	<div></div>	54.6%	18
No	<div></div>	45.5%	15
	answered question		33
	skipped question		0

How would you rate the overall quality and content of the plan.			
		Response Percent	Response Count
1 - Poor		0.0%	0
2	<div></div>	12.5%	2
3 - Average	<div></div>	50.0%	8
4	<div></div>	43.8%	7
5 - Excellent	<div></div>	6.3%	1
		answered question	16
		skipped question	17

Do you feel the plan accurately portrays natural and man-made hazards in Montana?			
		Response Percent	Response Count
Yes	<div></div>	87.5%	14
No	<div></div>	25.0%	4
		answered question	16
		skipped question	17

What improvements do you think could be made to the plan?		
		Response Count
		9
	<i>answered question</i>	9
	<i>skipped question</i>	24

From the perspective of the jurisdiction that you represent or permanently reside in, how do you perceive the risk to each of the following hazards: Risk is defined as the potential to affect people, environment, economy and property of your jurisdiction. High/Medium/Low for:					
	High	Medium	Low	Rating Average	Response Count
Communicable Disease	38.1% (8)	42.9% (9)	19.0% (4)	1.81	21
Drought	28.6% (6)	57.1% (12)	14.3% (3)	1.86	21
Earthquake	40.0% (8)	45.0% (9)	15.0% (3)	1.75	20
Flooding/Dam Failure	52.4% (11)	38.1% (8)	9.5% (2)	1.57	21
Hazardous Material Incidents	42.9% (9)	47.6% (10)	9.5% (2)	1.67	21
Landslide	14.3% (3)	33.3% (7)	52.4% (11)	2.38	21
Terrorism/Violence	4.8% (1)	23.8% (5)	71.4% (15)	2.67	21
Thunderstorm Wind, Hail, and Tornadoes	33.3% (7)	52.4% (11)	14.3% (3)	1.81	21
Volcanic Eruption	4.8% (1)	9.5% (2)	85.7% (18)	2.81	21
Wildfire	85.7% (18)	14.3% (3)	0.0% (0)	1.14	21
Winter Storms/Avalanche	33.3% (7)	57.1% (12)	9.5% (2)	1.76	21
	answered question				21
	skipped question				12

Please comment on the impact that future development will have on the hazards listed from the perspective of your jurisdiction.			
		Response Percent	Response Count
Communicable Disease	<div></div>	82.4%	14
Drought	<div></div>	88.2%	15
Earthquake	<div></div>	88.2%	15
Flooding/Dam Failure	<div></div>	94.1%	16
Hazardous Material Incidents	<div></div>	88.2%	15
Landslide	<div></div>	70.6%	12
Terrorism/Violence	<div></div>	82.4%	14
Thunderstorm Wind, Hail, and Tornadoes	<div></div>	64.7%	11
Volcanic Eruption	<div></div>	58.8%	10
Wildfire	<div></div>	94.1%	16
Winter Storms/Avalanche	<div></div>	82.4%	14
	answered question		17
	skipped question		16

Please prioritize the following proposed NEW goals for the State Plan Update by order of importance from the perspective of your jurisdiction (1=highest / 10=lowest):											
	High				Medium					Low	Rating Average
Maximize the Use of Mitigation Actions that Prevent Losses from All Hazards	44.4% (8)	5.6% (1)	27.8% (5)	5.6% (1)	5.6% (1)	0.0% (0)	11.1% (2)	0.0% (0)	0.0% (0)	0.0% (0)	2.67
Increase State’s Capability to Provide and Assist Locals with Mitigation Opportunities	41.2% (7)	17.6% (3)	5.9% (1)	0.0% (0)	29.4% (5)	0.0% (0)	5.9% (1)	0.0% (0)	0.0% (0)	0.0% (0)	2.82
Reduce the Community Impacts of Wildland and Rangeland Fires	41.2% (7)	17.6% (3)	29.4% (5)	5.9% (1)	5.9% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	2.18
Mitigate the Potential Loss of Life and Property from Flooding (riverine flooding, ice jams, dam failure)	11.8% (2)	11.8% (2)	0.0% (0)	5.9% (1)	58.8% (10)	5.9% (1)	0.0% (0)	0.0% (0)	0.0% (0)	5.9% (1)	4.47
Minimize Economic Impacts of Drought	0.0% (0)	11.8% (2)	11.8% (2)	5.9% (1)	41.2% (7)	0.0% (0)	17.6% (3)	5.9% (1)	5.9% (1)	0.0% (0)	5.12
Reduce Impacts from Severe Summer Weather (thunderstorm wind, hail, tornadoes)	5.9% (1)	5.9% (1)	11.8% (2)	5.9% (1)	29.4% (5)	5.9% (1)	5.9% (1)	17.6% (3)	11.8% (2)	0.0% (0)	5.47
Reduce Impacts from Severe Winter Weather (extreme cold, snow, ice)	5.9% (1)	17.6% (3)	0.0% (0)	5.9% (1)	29.4% (5)	0.0% (0)	17.6% (3)	11.8% (2)	11.8% (2)	0.0% (0)	5.35
Reduce Potential Earthquake Losses in Western Montana	5.9% (1)	5.9% (1)	5.9% (1)	11.8% (2)	29.4% (5)	0.0% (0)	17.6% (3)	17.6% (3)	5.9% (1)	0.0% (0)	5.47
Reduce Losses from Hazardous Material Incidents	27.8% (5)	0.0% (0)	22.2% (4)	0.0% (0)	22.2% (4)	5.6% (1)	0.0% (0)	16.7% (3)	0.0% (0)	5.6% (1)	4.28
Encourage Mitigation of Potentially Devastating but Historically Less Frequent Hazards	11.8% (2)	11.8% (2)	0.0% (0)	0.0% (0)	29.4% (5)	0.0% (0)	11.8% (2)	23.5% (4)	11.8% (2)	0.0% (0)	5.59
	answered question										
	skipped question										

Please indicate any additional Goals you think should be added to the State Plan.		
		Response Count
		6
	answered question	6
	skipped question	27

Goal: Maximize the use of mitigation actions that prevent losses from all hazards.											
	High				Medium					Low	Rating Average
Develop GIS databases of hazard risk maps and state buildings and infrastructure to use in mitigation planning	40.0% (6)	6.7% (1)	13.3% (2)	13.3% (2)	13.3% (2)	0.0% (0)	6.7% (1)	6.7% (1)	0.0% (0)	0.0% (0)	3.13
Conduct Level 1 HAZUS-MH analyses for all Montana counties	6.7% (1)	6.7% (1)	13.3% (2)	26.7% (4)	33.3% (5)	0.0% (0)	6.7% (1)	0.0% (0)	0.0% (0)	6.7% (1)	4.47
Improve Statewide HAZUS data	6.7% (1)	13.3% (2)	26.7% (4)	6.7% (1)	33.3% (5)	0.0% (0)	6.7% (1)	0.0% (0)	0.0% (0)	6.7% (1)	4.20
Determine GPS locations of all State buildings for detailed, non-public analysis	13.3% (2)	33.3% (5)	6.7% (1)	6.7% (1)	26.7% (4)	0.0% (0)	6.7% (1)	0.0% (0)	0.0% (0)	6.7% (1)	3.73
Conduct a non-public hazard assessment that utilizes specific State building locations and infrastructure locations to be used for mitigation actions and homeland security purposes	0.0% (0)	20.0% (3)	20.0% (3)	6.7% (1)	20.0% (3)	0.0% (0)	20.0% (3)	13.3% (2)	0.0% (0)	0.0% (0)	4.73
Promote earth science education of hazards in schools	33.3% (5)	6.7% (1)	6.7% (1)	6.7% (1)	33.3% (5)	0.0% (0)	13.3% (2)	0.0% (0)	0.0% (0)	0.0% (0)	3.53
Conduct a Statewide warning capability assessment	26.7% (4)	20.0% (3)	6.7% (1)	20.0% (3)	20.0% (3)	0.0% (0)	0.0% (0)	6.7% (1)	0.0% (0)	0.0% (0)	3.20
Develop a Statewide All-Hazard Emergency Alert System (EAS) plan	73.3% (11)	0.0% (0)	6.7% (1)	13.3% (2)	6.7% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	1.80
Continuously improve hazard assessments and the associated evaluation of vulnerabilities from all hazards.	20.0% (3)	13.3% (2)	20.0% (3)	6.7% (1)	40.0% (6)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	3.33
Increase the public awareness of hazards	26.7% (4)	20.0% (3)	13.3% (2)	13.3% (2)	20.0% (3)	0.0% (0)	0.0% (0)	6.7% (1)	0.0% (0)	0.0% (0)	3.13
Enable every citizen in Montana to receive critical warning information immediately no matter where he/she is	53.3% (8)	6.7% (1)	6.7% (1)	6.7% (1)	20.0% (3)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	6.7% (1)	2.80
Increase readiness for the protection of life and property during an event	46.7% (7)	20.0% (3)	6.7% (1)	6.7% (1)	20.0% (3)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	2.33
	answered question										

	<i>skipped question</i>
--	-------------------------

Please write-in any specific mitigation projects related to this goal you feel should be added to the plan.										
										Response Count
										5
	<i>answered question</i>									5
	<i>skipped question</i>									28

Goal: Increase State’s capability to provide and assist locals with mitigation opportunities.											
	High				Medium					Low	Rating Average
Continue outreach of mitigation project funding opportunities	26.7% (4)	13.3% (2)	33.3% (5)	0.0% (0)	20.0% (3)	0.0% (0)	0.0% (0)	6.7% (1)	0.0% (0)	0.0% (0)	3.07
Provide technical assistance with the environmental review process	6.7% (1)	20.0% (3)	26.7% (4)	0.0% (0)	26.7% (4)	0.0% (0)	6.7% (1)	6.7% (1)	0.0% (0)	6.7% (1)	4.27
Provide technical assistance for project development	13.3% (2)	13.3% (2)	26.7% (4)	6.7% (1)	33.3% (5)	0.0% (0)	0.0% (0)	6.7% (1)	0.0% (0)	0.0% (0)	3.67
Create an electronic database of completed mitigation projects in Montana	6.7% (1)	13.3% (2)	6.7% (1)	13.3% (2)	33.3% (5)	6.7% (1)	0.0% (0)	6.7% (1)	6.7% (1)	6.7% (1)	4.93
Increase the scope and participation of the State Hazard Mitigation Team	6.7% (1)	33.3% (5)	13.3% (2)	6.7% (1)	20.0% (3)	0.0% (0)	6.7% (1)	6.7% (1)	0.0% (0)	6.7% (1)	4.07
Create a private advisory group for mitigation	20.0% (3)	13.3% (2)	13.3% (2)	6.7% (1)	13.3% (2)	6.7% (1)	6.7% (1)	6.7% (1)	0.0% (0)	13.3% (2)	4.53
Streamline mitigation standards in state and/or local subdivision regulations	14.3% (2)	21.4% (3)	21.4% (3)	0.0% (0)	28.6% (4)	0.0% (0)	7.1% (1)	7.1% (1)	0.0% (0)	0.0% (0)	3.71
Strengthen state and/or local building codes	46.7% (7)	6.7% (1)	26.7% (4)	6.7% (1)	0.0% (0)	0.0% (0)	0.0% (0)	6.7% (1)	0.0% (0)	6.7% (1)	2.87
Require growth policies consider natural and man-made hazard	40.0% (6)	6.7% (1)	13.3% (2)	6.7% (1)	13.3% (2)	0.0% (0)	6.7% (1)	13.3% (2)	0.0% (0)	0.0% (0)	3.40
Create a state funded grant program to assist with the 25% match for local governments	33.3% (5)	26.7% (4)	0.0% (0)	6.7% (1)	13.3% (2)	0.0% (0)	6.7% (1)	6.7% (1)	6.7% (1)	0.0% (0)	3.40
Coordinate local plan development	28.6% (4)	0.0% (0)	21.4% (3)	0.0% (0)	28.6% (4)	0.0% (0)	14.3% (2)	7.1% (1)	0.0% (0)	0.0% (0)	3.93
Provide technical assistance with											

hazard mapping for rural communities without GIS capabilities	26.7% (4)	13.3% (2)	33.3% (5)	0.0% (0)	6.7% (1)	6.7% (1)	0.0% (0)	6.7% (1)	0.0% (0)	6.7% (1)	3.47
	answered question										
	skipped question										

Please write-in any specific mitigation projects related to this goal you feel should be added to the plan.		
		Response Count
		3
	<i>answered question</i>	3
	<i>skipped question</i>	30

Goal: Mitigate the potential loss of life and property from flooding.											
	High				Medium					Low	Rating Average
Develop and improve upon model floodplain ordinances for local governments	21.4% (3)	14.3% (2)	7.1% (1)	21.4% (3)	28.6% (4)	0.0% (0)	0.0% (0)	7.1% (1)	0.0% (0)	0.0% (0)	3.57
Develop mapping for unmapped flood prone areas	21.4% (3)	28.6% (4)	7.1% (1)	14.3% (2)	14.3% (2)	0.0% (0)	7.1% (1)	7.1% (1)	0.0% (0)	0.0% (0)	3.36
Update floodplain mapping of mapped areas	14.3% (2)	28.6% (4)	0.0% (0)	21.4% (3)	21.4% (3)	0.0% (0)	0.0% (0)	7.1% (1)	0.0% (0)	7.1% (1)	3.93
Establish a schedule for NFIP map reviews and updates	7.1% (1)	7.1% (1)	21.4% (3)	7.1% (1)	35.7% (5)	0.0% (0)	0.0% (0)	7.1% (1)	0.0% (0)	14.3% (2)	4.93
Provide outreach and technical assistance in joining the NFIP Community Rating System for reducing flood insurance premiums	7.1% (1)	14.3% (2)	7.1% (1)	28.6% (4)	35.7% (5)	0.0% (0)	0.0% (0)	7.1% (1)	0.0% (0)	0.0% (0)	4.07
Increase the public awareness of flood mitigation	28.6% (4)	21.4% (3)	21.4% (3)	7.1% (1)	14.3% (2)	0.0% (0)	0.0% (0)	7.1% (1)	0.0% (0)	0.0% (0)	2.93
Reduce the number of current and future structures in the floodplain	57.1% (8)	7.1% (1)	7.1% (1)	0.0% (0)	14.3% (2)	14.3% (2)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	2.50
Prevent flooding of structures and infrastructure from inadequate storm drainage and poorly designed irrigation waterways	35.7% (5)	7.1% (1)	21.4% (3)	14.3% (2)	14.3% (2)	7.1% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	2.86
Provide adequate warning of flooding events	50.0% (7)	35.7% (5)	14.3% (2)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	1.64

	<i>answered question</i>
	<i>skipped question</i>

Please write-in any specific mitigation projects related to this goal you feel should be added to the plan.	
	Response Count
	2
	<i>answered question</i> 2
	<i>skipped question</i> 31

Goal: Reduce the community impacts of wildland and rangeland fires.											
	High				Medium					Low	Rating Average
Reduce fuels in the wildland urban interface	64.3% (9)	7.1% (1)	7.1% (1)	0.0% (0)	14.3% (2)	7.1% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	2.14
Reduce hazardous fuels in rangeland areas	42.9% (6)	7.1% (1)	7.1% (1)	14.3% (2)	7.1% (1)	0.0% (0)	7.1% (1)	7.1% (1)	0.0% (0)	7.1% (1)	3.50
Accurately assess and address the current wildland urban interface problems at the subdivision level	42.9% (6)	21.4% (3)	14.3% (2)	0.0% (0)	21.4% (3)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	2.36
Enhance firefighting resources and improve firefighting capabilities	50.0% (7)	7.1% (1)	14.3% (2)	14.3% (2)	14.3% (2)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	2.36
Enhance community awareness of wildfires through education	71.4% (10)	14.3% (2)	0.0% (0)	7.1% (1)	7.1% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	1.64
Enhance effectiveness of response and evacuation	42.9% (6)	14.3% (2)	14.3% (2)	14.3% (2)	14.3% (2)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	2.43
Establish mapping or record keeping practices to support fuel management strategies	28.6% (4)	21.4% (3)	7.1% (1)	7.1% (1)	35.7% (5)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	3.00
Minimize human-caused ignition sources in fire-prone areas	35.7% (5)	14.3% (2)	7.1% (1)	0.0% (0)	21.4% (3)	7.1% (1)	7.1% (1)	0.0% (0)	0.0% (0)	7.1% (1)	3.57
Centralize fire history documentation	21.4% (3)	14.3% (2)	7.1% (1)	7.1% (1)	28.6% (4)	0.0% (0)	0.0% (0)	7.1% (1)	0.0% (0)	14.3% (2)	4.43
Develop a consistent Statewide fire risk assessment system	21.4% (3)	28.6% (4)	14.3% (2)	7.1% (1)	14.3% (2)	0.0% (0)	0.0% (0)	7.1% (1)	0.0% (0)	7.1% (1)	3.50
Encourage sustainable growth in wildland fire hazard areas	30.8% (4)	15.4% (2)	0.0% (0)	7.7% (1)	23.1% (3)	0.0% (0)	0.0% (0)	15.4% (2)	7.7% (1)	0.0% (0)	4.00

	<i>answered question</i>
	<i>skipped question</i>

Please write-in any specific mitigation projects related to this goal you feel should be added to the plan.		
		Response Count
		4
	<i>answered question</i>	4
	<i>skipped question</i>	29

Goal: Reduce potential earthquake losses in Western Montana.											
	High				Medium					Low	Rating Average
Goal: Reduce potential earthquake losses in Western Montana.	14.3% (2)	21.4% (3)	0.0% (0)	0.0% (0)	28.6% (4)	14.3% (2)	7.1% (1)	0.0% (0)	0.0% (0)	14.3% (2)	4.79
Provide greater enforcement of current building codes	14.3% (2)	28.6% (4)	28.6% (4)	0.0% (0)	21.4% (3)	0.0% (0)	7.1% (1)	0.0% (0)	0.0% (0)	0.0% (0)	3.14
Develop model seismic building codes	0.0% (0)	28.6% (4)	14.3% (2)	0.0% (0)	35.7% (5)	7.1% (1)	7.1% (1)	0.0% (0)	0.0% (0)	7.1% (1)	4.43
Create stronger building standards for critical facilities and structures housing vulnerable populations	28.6% (4)	7.1% (1)	14.3% (2)	7.1% (1)	21.4% (3)	7.1% (1)	7.1% (1)	0.0% (0)	0.0% (0)	7.1% (1)	3.86
Require earthquake drills in schools in Western Montana	35.7% (5)	21.4% (3)	14.3% (2)	7.1% (1)	14.3% (2)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	7.1% (1)	2.93
Expand and upgrade earthquake monitoring network and reporting capabilities	7.1% (1)	28.6% (4)	14.3% (2)	21.4% (3)	28.6% (4)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	3.36
Continue “Earthquake Preparedness Month” outreach activities during the month of October	7.1% (1)	21.4% (3)	7.1% (1)	14.3% (2)	35.7% (5)	0.0% (0)	0.0% (0)	7.1% (1)	0.0% (0)	7.1% (1)	4.36
Implement non-structural mitigation projects to harden State and community infrastructure from seismic hazards	14.3% (2)	7.1% (1)	21.4% (3)	14.3% (2)	42.9% (6)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	3.64
Seismically retrofit existing critical facilities and government assets	14.3% (2)	7.1% (1)	21.4% (3)	0.0% (0)	35.7% (5)	14.3% (2)	0.0% (0)	0.0% (0)	0.0% (0)	7.1% (1)	4.29
	<i>answered question</i>										

	<i>skipped question</i>
--	-------------------------

Please write-in any specific mitigation projects related to this goal you feel should be added to the plan.		
		Response Count
		0
	<i>answered question</i>	0
	<i>skipped question</i>	33

Goal: Minimize economic impacts of drought.											
	High				Medium					Low	Rating Average
Develop a system for distributing information on current conditions	14.3% (2)	7.1% (1)	28.6% (4)	14.3% (2)	14.3% (2)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	21.4% (3)	4.57
Continue to support the State Drought Advisory Committee	21.4% (3)	14.3% (2)	21.4% (3)	7.1% (1)	7.1% (1)	14.3% (2)	0.0% (0)	0.0% (0)	0.0% (0)	14.3% (2)	4.07
Install Statewide drought monitoring stations	14.3% (2)	21.4% (3)	14.3% (2)	7.1% (1)	14.3% (2)	7.1% (1)	0.0% (0)	0.0% (0)	0.0% (0)	21.4% (3)	4.57
Use long-term groundwater monitoring to assess drought conditions	14.3% (2)	28.6% (4)	21.4% (3)	7.1% (1)	7.1% (1)	0.0% (0)	7.1% (1)	0.0% (0)	0.0% (0)	14.3% (2)	3.93
Educate farmers and ranchers in fiscally preventing drought losses	42.9% (6)	21.4% (3)	21.4% (3)	0.0% (0)	7.1% (1)	0.0% (0)	0.0% (0)	7.1% (1)	0.0% (0)	0.0% (0)	2.43
Educate farmers and ranchers in reducing physical losses during dry seasons	28.6% (4)	28.6% (4)	21.4% (3)	0.0% (0)	7.1% (1)	0.0% (0)	0.0% (0)	7.1% (1)	0.0% (0)	7.1% (1)	3.14
Identify water retention projects that could lessen the effects of drought	42.9% (6)	28.6% (4)	14.3% (2)	0.0% (0)	7.1% (1)	7.1% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	2.21
	<i>answered question</i>										
	<i>skipped question</i>										

Please write-in any specific mitigation projects related to this goal you feel should be added to the plan.											
											Response Count
											2
	answered question										2
	skipped question										31

Goal: Reduce impacts from severe winter weather.												
	High				Medium					Low	Rating Average	F
Distribute winter driving and survival tips	14.3% (2)	28.6% (4)	14.3% (2)	0.0% (0)	28.6% (4)	7.1% (1)	0.0% (0)	0.0% (0)	0.0% (0)	7.1% (1)	3.71	
Increase public awareness of winter weather hazards	21.4% (3)	14.3% (2)	35.7% (5)	0.0% (0)	21.4% (3)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	7.1% (1)	3.36	
Create partnerships with utility companies and negotiate for shorten span distances between power poles to better withstand snow loads and severe storms	7.1% (1)	14.3% (2)	21.4% (3)	14.3% (2)	7.1% (1)	0.0% (0)	0.0% (0)	0.0% (0)	7.1% (1)	28.6% (4)	5.43	
Improve communication between emergency response personnel and road departments to facilitate coordination during extreme weather	42.9% (6)	21.4% (3)	21.4% (3)	0.0% (0)	14.3% (2)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	2.21	
Structurally analyze all buildings or rooms identified as shelters and strengthen these as necessary	14.3% (2)	14.3% (2)	21.4% (3)	7.1% (1)	28.6% (4)	0.0% (0)	0.0% (0)	7.1% (1)	0.0% (0)	7.1% (1)	4.07	
	answered question											
	skipped question											

Please write-in any specific mitigation projects related to this goal you feel should be added to the plan.											
											Response Count
											1
	answered question										1
	skipped question										32

Goal: Reduce impacts from Severe Summer Weather (thunderstorms, wind, hail, tornadoes)												
	High				Medium					Low	Rating Average	R
Install safety film on critical facilities to prevent shattering glass.	0.0% (0)	14.3% (2)	28.6% (4)	14.3% (2)	21.4% (3)	7.1% (1)	0.0% (0)	0.0% (0)	0.0% (0)	14.3% (2)	4.64	
Encourage development and enforcement of wind resistant buildings and construction codes	7.7% (1)	7.7% (1)	38.5% (5)	0.0% (0)	30.8% (4)	7.7% (1)	0.0% (0)	0.0% (0)	0.0% (0)	7.7% (1)	4.15	
Develop and implement programs to keep trees from threatening lives, property and public infrastructure during windstorm events	7.1% (1)	14.3% (2)	14.3% (2)	14.3% (2)	35.7% (5)	0.0% (0)	0.0% (0)	7.1% (1)	0.0% (0)	7.1% (1)	4.43	
	answered question											
	skipped question											

Please write-in any specific mitigation projects related to this goal you feel should be added to the plan.		
		Response Count
		0
	answered question	0
	skipped question	33

Goal: Reduce losses from Hazardous Material Incidents												
	High				Medium					Low	Rating Average	Res C
Develop communication plan for hazardous material emergencies	42.9% (6)	35.7% (5)	14.3% (2)	0.0% (0)	7.1% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	1.93	
Enhance information capability on types of hazardous materials traveling transportation routes	42.9% (6)	21.4% (3)	14.3% (2)	0.0% (0)	7.1% (1)	0.0% (0)	7.1% (1)	0.0% (0)	0.0% (0)	7.1% (1)	2.86	
Provide hazardous material training to emergency responders	42.9% (6)	42.9% (6)	14.3% (2)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	1.71	
Develop evacuation procedures for homes near transportation networks that commonly carry hazardous materials	42.9% (6)	35.7% (5)	7.1% (1)	7.1% (1)	7.1% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	2.00	
	answered question											
	skipped question											

Please write-in any specific mitigation projects related to this goal you feel should be added to the plan.		
		Response Count
		0
	answered question	0
	skipped question	33

Goal: Encourage mitigation of potentially devastating but historically less frequent hazards.											
	High				Medium					Low	Rating Average
Identify and map areas of greatest landslide and avalanche potential	0.0% (0)	7.1% (1)	14.3% (2)	0.0% (0)	42.9% (6)	14.3% (2)	7.1% (1)	0.0% (0)	0.0% (0)	14.3% (2)	5.50
Create a landslide/avalanche technical committee	0.0% (0)	7.1% (1)	21.4% (3)	7.1% (1)	21.4% (3)	7.1% (1)	0.0% (0)	7.1% (1)	0.0% (0)	28.6% (4)	6.00
Support the mitigation related goals, objectives, and actions of the Montana Homeland Security Strategic Plan	14.3% (2)	7.1% (1)	21.4% (3)	7.1% (1)	21.4% (3)	0.0% (0)	0.0% (0)	14.3% (2)	0.0% (0)	14.3% (2)	4.86
Reduce losses from communicable disease	21.4% (3)	28.6% (4)	7.1% (1)	7.1% (1)	14.3% (2)	7.1% (1)	7.1% (1)	7.1% (1)	0.0% (0)	0.0% (0)	3.50
Increase awareness of risks from communicable disease	35.7% (5)	28.6% (4)	7.1% (1)	7.1% (1)	14.3% (2)	0.0% (0)	0.0% (0)	7.1% (1)	0.0% (0)	0.0% (0)	2.71
	answered question										
	skipped question										

Please write-in any specific mitigation projects related to this goal you feel should be added to the plan.		
		Response Count
		0
	answered question	0
	skipped question	33

Please indicate how long it took you to complete the survey.			
		Response Percent	Response Count
5 minutes		0.0%	0
10 minutes	<div></div>	28.6%	4
15 minutes	<div></div>	21.4%	3
20 minutes	<div></div>	14.3%	2
30 minutes	<div></div>	28.6%	4
Greater than 30 minutes	<div></div>	7.1%	1
	answered question		14
	skipped question		19

District 1 On-Line Survey - Other Jurisdictions Completing Survey

[close window](#)












Displaying 1 - 10 of 10 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. fire district	Wed, 6/20/07 9:30 AM
 Find	2. American Red Cross of Montana	Wed, 6/6/07 1:12 PM
 Find	3. Red Cross	Tue, 5/29/07 3:00 PM
 Find	4. Private Business	Fri, 5/25/07 8:09 AM
 Find	5. local gov't: fire district	Thu, 5/24/07 10:45 AM
 Find	6. Volunteer Ambulance Supervisor	Thu, 5/24/07 10:12 AM
 Find	7. municipal	Wed, 5/23/07 5:29 PM
 Find	8. Municipality	Wed, 5/23/07 3:44 PM
 Find	9. City	Wed, 5/23/07 2:22 PM
 Find	10. University	Wed, 5/23/07 1:41 PM
		10 responses per page 











Displaying 1 - 10 of 10 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text	Response Date
 Find 1. It is not a plan. It only identified hazards to be mitigated. There is no assignment of tasks to specific agencies. The report does not include local fire districts as first responders or mitigators (inclusion of state organizations such as the Fire Chiefs Association or FF Association does not count; these groups do not represent the chiefs or firefighters.)	Wed, 6/20/07 9:32 AM
 Find 2. liuglgf	Tue, 6/5/07 9:25 AM
 Find 3. none.	Tue, 5/29/07 3:01 PM
 Find 4. none.	Tue, 5/29/07 3:00 PM
 Find 5. It only identifies risks and doesn't really address mitigation. There is NO coverage of response. Local fire districts are not included in response planning.	Thu, 5/24/07 10:48 AM
 Find 6. 1. Increased emphasis on working County and State working more closely with your Federal counterparts that are already trained and experienced in the different areas of Hazards utilize the expertise and federal funding. 2. Increased emphasis on mitigation measure that can be taken by the general public in advance - and increase awareness among our state and federal congressional staff - for funding of mitigation.	Thu, 5/24/07 10:25 AM
 Find 7. add infectious disease (pandemic influenza, smallpox, etc) as a natural hazard. Hazard Table. When assigning a value to each hazard based on potential to impact people & property, list frequency on a different table so not to artificially elevate one hazard over another	Wed, 5/23/07 8:34 PM
 Find 8. Additional contact information for local governmental agencies.	Wed, 5/23/07 3:44 PM
 Find 9. More detailed assessments of hazards at the local (county) level will change the portrayed hazards for the state.	Wed, 5/23/07 2:57 PM
 Find 10. In my opinion the ranking of hazards is inaccurate. The problem lies with probability (frequency) vs. severity (loss potential) and what individuals consider to be a "risk". I think it would be helpful to provide a clear definition or standardized guidelines in order to get more accurate feedback. I also have some concerns with the background or expertise of those providing input on the plan. From what I have witnessed, input from individuals with no experience in emergency response or hazard mitigation carries the same weight as input from local fire chiefs and other public safety officials. In my opinion, this impacts the validity of the hazards and risk rankings.	Wed, 5/23/07 2:45 PM
10 responses per page	

Distict 1 On-Line Survey - Suggested New Goals

close window







Displaying 1 - 6 of 6 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text	Response Date
 Find 1. I feel that the state should look at the economics of fire suppression. Outsourcing fire suppression to a private enterprise will prove to be more expensive in the future. In the past you needed dry conditions and an ignition source to start a forest fire. With the evolution of fire suppression being big business to the private sector, we now only need dry conditions to ensure a very active fire season. Human caused fires are at an all time high and I feel the government will need to take the suppression effort back into their own hands.	Mon, 6/11/07 12:58 PM
 Find 2. There should be a real push to empower communities to be as self-sufficient as possible on many levels, including food production, sustainable energy alternatives, and drinkable water supply in addition to just mitigating for possible disasters. There is a root to the root of the problems that come with coping with and recovering from disasters, and they should be included in the decision making process. Also, the Red Cross has developed a school curriculum called Masters of Disaster (www.redcross.org/disaster/masters) that addresses possible disasters in Montana and what students K-8 can do to help prepare their families for such emergency situations. It is a comprehensive curriculum that incorporates teaching standards so that it can be plugged in to existing educational goals in language arts, math, science, and social studies. Another component of this program is called Facing Fear, and gives teachers K-12 tools to help students and their families cope with disastrous events, both natural and man-made, no matter how far away such events occurred.	Thu, 6/7/07 8:28 AM
 Find 3. Increase cooperation with Federal Agencies already trained in All Hazard Risk and Incident Command structure teams. Increase funding mechanisms to allow immediate use of the Federal Command Teams.	Thu, 5/24/07 12:22 PM
 Find 4. wild life mitigation	Thu, 5/24/07 7:40 AM
 Find 5. Prepare for potential impacts of pandemic influenza outbreak.	Wed, 5/23/07 3:08 PM
 Find 6. Develop executive orders that suspend the normal "standards of care" in a pandemic. Create a State Task Force to examine and provide ethical guidance to health care providers and institutions in a pandemic situation.	Wed, 5/23/07 1:52 PM
10 responses per page	

District 1 On-Line Survey - Additional Mitigation Projects for Goal 1

[close window](#)







Displaying 1 - 5 of 5 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. Masters of Disaster, a comprehensive curriculum developed by specialists and provided by the American Red Cross. More information can be obtained by visiting the website: www.redcross.org/disaster/masters or by calling the Missoula office at 549-6441.	Thu, 6/7/07 8:43 AM
 Find	2. People should be forced/encouraged to start taking their own responsibility and ownership for their own safety and well-being. It is not the job of the FED/STATE/ CO government alone to try and make people safe from fire, flood, etc. Provide opportunities for folks to learn how to protect themselves and then expect them to do it!	Wed, 5/30/07 1:25 PM
 Find	3. Better communication methods on a state wide basis; funding for all branches of EMS to be able to provide first responders with Radios and communication tools in event of disaster.	Thu, 5/24/07 12:26 PM
 Find	4. Promote citizen self sufficiency and educate public on limitations of government's ability to respond.	Wed, 5/23/07 3:19 PM
 Find	5. fuel reduction in the forests. Selective harvest and thinning.	Wed, 5/23/07 1:56 PM
		10 responses per page 

District 1 On-Line Survey - Additional Mitigation Projects for Goal 2

[close window](#)





Displaying 1 - 3 of 3 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. FUNDING FUNDING FUNDING - assist small local groups with funding for Hazard Mitigation before the disaster occurs.	Thu, 5/24/07 12:26 PM
 Find	2. Provide funding to map the numerous unrecognized floodplains across the State.	Wed, 5/23/07 3:08 PM
 Find	3. fuel reduction in the forests	Wed, 5/23/07 1:56 PM
		10 responses per page 

District 1 On-Line Survey - Other Drought Mitigation Projects

[close window](#)




Displaying 1 - 2 of 2 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. By "educate" farmers and ranchers, I hope that you intend to listen to them, as well, as they've been doing this for quite some time. I would be more inclined to spend money on scientific research and in working with farmers on site than to fund x number of committees and other groups that may be more "fluff" than proactive bodies that get things done.	Thu, 6/7/07 9:08 AM
 Find	2. Make flood irrigation illegal.	Wed, 5/30/07 1:30 PM
		10 responses per page 

District 1 On-Line Survey - Other Flood Mitiation Projects

[close window](#)




Displaying 1 - 2 of 2 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. I know that people along the Blackfoot corridor were upset at the ordinance restricting future development in the floodplain. Because of that reaction, there needs to be more of an effort to include the public in all of these mitigation processes, and to make more of an effort to educate the public on why these decisions are made that essentially limit landowner's freedoms, which is a big deal in Montana.	Thu, 6/7/07 9:02 AM
 Find	2. Provide planning assistance to local responders	Thu, 5/24/07 11:19 AM
		10 responses per page 

District 1 On-Line Survey - Other Wildfire Mitigation Projects

[close window](#)






Displaying 1 - 4 of 4 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. mitigate making fire supression big business or we will never win the battle against wildfires.	Mon, 6/11/07 1:11 PM
 Find	2. As long as there is a wildland/urban interface, there will be wildfire problems. Instead of spending so much time and resources on fuels reduction, it seems more reasonable to firmly limit development possibilities in such areas. I know that people want to live in these beautiful areas, but money does not grow on trees and our resources are limited. I think the money that was put towards fuels reduction could be shifted to fund education efforts and to pass legislation limiting development in forested, fire-prone areas.	Thu, 6/7/07 9:02 AM
 Find	3. Emphasize Shelter in place (Prepare, Stay, and Defend)	Thu, 5/24/07 11:19 AM
 Find	4. Assist local fire jurisdictions with wildfire response and fuel mitigation efforts.	Wed, 5/23/07 3:30 PM
		10 responses per page 

District 1 On-Line Survey - Other Winter Weather Mitigation Projects

[close window](#)



Displaying 1 - 1 of 1 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. Have utilities put there equipment underground in areas that are hit by extreme weather.	Thu, 5/24/07 8:02 AM
		10 responses per page 

District 1 On-Line Survey-Impact of Future Development on Communicable Disease

[close window](#)
















Displaying 1 - 14 of 14 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. Septic systems in county, pharmaceuticals	Thu, 6/21/07 9:40 AM
 Find	2. It will increase the possability	Mon, 6/11/07 12:49 PM
 Find	3. Montana's isolated clusters of population may become more connected with increased development, which would affect the ability for disease to spread	Thu, 6/7/07 8:20 AM
 Find	4. communicable disease spreads more readily in densely populated areas	Wed, 6/6/07 8:19 AM
 Find	5. high	Mon, 6/4/07 8:02 AM
 Find	6. More people, more easier for things to spread	Wed, 5/30/07 1:17 PM
 Find	7. Critical - Hamilton Hospital could easily be maxed to capacity. Current Hospital based ambulance will be stretched to it's limits if not overwhelmed. Volunteer Services in outlying areas overwhelmed	Thu, 5/24/07 12:19 PM
 Find	8. No change	Thu, 5/24/07 10:58 AM
 Find	9. pandemic could occur	Thu, 5/24/07 9:41 AM
 Find	10. LOW	Thu, 5/24/07 7:36 AM
 Find	11. increased with denser populations	Thu, 5/24/07 4:23 AM
 Find	12. Increase	Wed, 5/23/07 3:47 PM
 Find	13. Increased population would increase the impact.	Wed, 5/23/07 2:57 PM
 Find	14. more development more people that live here that will get sick	Wed, 5/23/07 1:49 PM
		25 responses per page 

District 1 On-Line Survey-Impact of Future Development on Drought

[close window](#)
















Displaying 1 - 15 of 15 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. Will continue to be more prevalent with global warming	Fri, 6/15/07 9:31 AM
 Find	2. not much impact	Mon, 6/11/07 12:49 PM
 Find	3. Droughts leading to wildfire I think will be more significant than the droughts themselves at this point	Thu, 6/7/07 8:20 AM
 Find	4. more people, homes & businesses require more water	Wed, 6/6/07 8:19 AM
 Find	5. high	Mon, 6/4/07 8:02 AM
 Find	6. More people, less water and in a drought, that would be compounded	Wed, 5/30/07 1:17 PM
 Find	7. becoming less an issue with decline of agriculture	Wed, 5/30/07 11:19 AM
 Find	8. no impact	Thu, 5/24/07 12:19 PM
 Find	9. No change	Thu, 5/24/07 10:58 AM
 Find	10. economic	Thu, 5/24/07 9:41 AM
 Find	11. High	Thu, 5/24/07 7:36 AM
 Find	12. increased with additional development	Thu, 5/24/07 4:23 AM
 Find	13. Increase	Wed, 5/23/07 3:47 PM
 Find	14. Lessening as agricultural activity diminishes in our area.	Wed, 5/23/07 2:57 PM
 Find	15. More people use more water	Wed, 5/23/07 1:49 PM

25 responses per page

District 1 On-Line Survey-Impact of Future Development on Earthquake

[close window](#)

















Displaying 1 - 15 of 15 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. Damage to distribution systems, storage tanks, booster stations, WWTP facility	Thu, 6/21/07 9:40 AM
 Find	2. not much impact	Mon, 6/11/07 12:49 PM
 Find	3. With several towns on fault lines, earthquakes are a major concern of the Red Cross	Thu, 6/7/07 8:20 AM
 Find	4. more people, homes & businesses along fault lines increase potential for damage, death & injury	Wed, 6/6/07 8:19 AM
 Find	5. high	Mon, 6/4/07 8:02 AM
 Find	6. Pretty low here - more houses, more distruction	Wed, 5/30/07 1:17 PM
 Find	7. no developemental impact	Wed, 5/30/07 11:19 AM
 Find	8. Could severly impact routes and methods to transport pts and supplies along HWY 93.	Thu, 5/24/07 12:19 PM
 Find	9. Some increased risk	Thu, 5/24/07 10:58 AM
 Find	10. more people to care for	Thu, 5/24/07 9:41 AM
 Find	11. Higher	Thu, 5/24/07 7:36 AM
 Find	12. ncreased with additional development near faultlines	Thu, 5/24/07 4:23 AM
 Find	13. No Change	Wed, 5/23/07 3:47 PM
 Find	14. Risk will remain with areas of older construction as modern structures built to seizmic standards.	Wed, 5/23/07 2:57 PM
 Find	15. More people and buildings means more injury and damage	Wed, 5/23/07 1:49 PM
		25 responses per page 

District 1 On-Line Survey-Impact of Future Development on Landslide Hazard

[close window](#)














Displaying 1 - 12 of 12 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. not much impact	Mon, 6/11/07 12:49 PM
 Find	2. ?	Thu, 6/7/07 8:20 AM
 Find	3. deforestation increases opportunity for landslides	Wed, 6/6/07 8:19 AM
 Find	4. medium	Mon, 6/4/07 8:02 AM
 Find	5. Not a lot of risk - low rainfall - probably not a problem unless some builder gets stupid	Wed, 5/30/07 1:17 PM
 Find	6. improvements of highway could actually mitigate	Wed, 5/30/07 11:19 AM
 Find	7. Large exposure due to impact on highway access	Thu, 5/24/07 10:58 AM
 Find	8. keeps going up	Thu, 5/24/07 7:36 AM
 Find	9. stripping vegetation to allow development increases the probability of landslides	Thu, 5/24/07 4:23 AM
 Find	10. No Change	Wed, 5/23/07 3:47 PM
 Find	11. May increase as hillside development continues	Wed, 5/23/07 2:57 PM
 Find	12. If development is placed on unstable ground there will be more damage	Wed, 5/23/07 1:49 PM
		25 responses per page 

District 1 On-Line Survey-Impact of Future Development on Severe Summer Storms

[close window](#)













Displaying 1 - 11 of 11 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. Lightning strikes impacting power to water and sewer systems. Some generator backup, but not everywhere.	Thu, 6/21/07 9:40 AM
 Find	2. no impact	Mon, 6/11/07 12:49 PM
 Find	3. Global climate change will continue to produce more intense storm cells	Thu, 6/7/07 8:20 AM
 Find	4. medium	Mon, 6/4/07 8:02 AM
 Find	5. Global warming could increase this - more houses, more impacts	Wed, 5/30/07 1:17 PM
 Find	6. No change	Thu, 5/24/07 10:58 AM
 Find	7. will effect more people	Thu, 5/24/07 9:41 AM
 Find	8. more people the hazards go up	Thu, 5/24/07 7:36 AM
 Find	9. No Change	Wed, 5/23/07 3:47 PM
 Find	10. Likely to increase with climate change and expansion of infrastructure to new developments.	Wed, 5/23/07 2:57 PM
 Find	11. More development/people means more opportunities for damage	Wed, 5/23/07 1:49 PM
		25 responses per page 

District 1 On-Line Survey-Impact of Future Development on Terrorism Hazard

[close window](#)
















Displaying 1 - 14 of 14 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. Low probability due to limited effects on population (size), but possible violent actions to distribution system, booster stations, wells, storage tanks, and sewer lift stations would have severe impact due to limited backup and rerouting.	Thu, 6/21/07 9:40 AM
 Find	2. not much impact	Mon, 6/11/07 12:49 PM
 Find	3. As the population grows and more technological industry is brought to Montana, there may be a growing number of desirable targets for terrorists	Thu, 6/7/07 8:20 AM
 Find	4. any economic center can be the target of terrorists. Eco-terrorism is alive and well in Missoula County.	Wed, 6/6/07 8:19 AM
 Find	5. high	Mon, 6/4/07 8:02 AM
 Find	6. We have the lab and more development makes for better targets for the terooists	Wed, 5/30/07 1:17 PM
 Find	7. violence incidents to increase with population	Wed, 5/30/07 11:19 AM
 Find	8. Increased risk with 2 Level 4 Bio Labs in the valley 12 miles away	Thu, 5/24/07 12:19 PM
 Find	9. No change	Thu, 5/24/07 10:58 AM
 Find	10. could increase	Thu, 5/24/07 9:41 AM
 Find	11. same	Thu, 5/24/07 7:36 AM
 Find	12. Increase	Wed, 5/23/07 3:47 PM
 Find	13. I don't see Missoula as a likely target for terrorism.	Wed, 5/23/07 2:57 PM
 Find	14. Montana is unlikely to be a target of outside terrorism but more development/people may mean more kooks or not	Wed, 5/23/07 1:49 PM
		25 responses per page 

District 1 On-Line Survey-Impact of Future Development on Volcanic Eruption Hazard

[close window](#)












Displaying 1 - 10 of 10 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. no impact	Mon, 6/11/07 12:49 PM
 Find	2. If the Yellowstone caldera blows we're all going down, and in all seriousness, with the trend in migration westward, such a catastrophe will mean more and more casualties as more folks come to live near the caldera region.	Thu, 6/7/07 8:20 AM
 Find	3. all equal opportunity disaster...	Wed, 6/6/07 8:19 AM
 Find	4. low	Mon, 6/4/07 8:02 AM
 Find	5. not too likely unless Yellowstone blew it's top - more folks would mean more impacts	Wed, 5/30/07 1:17 PM
 Find	6. Unable to determine	Thu, 5/24/07 10:58 AM
 Find	7. none	Thu, 5/24/07 7:36 AM
 Find	8. No Change	Wed, 5/23/07 3:47 PM
 Find	9. Unlikely, but would have widespread and catostrophic result.	Wed, 5/23/07 2:57 PM
 Find	10. Depends on where the eruption is	Wed, 5/23/07 1:49 PM
		10 responses per page 

District 1 On-Line Survey-Impact of Future Development on Wildfire Hazard

[close window](#)


















Displaying 1 - 16 of 16 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. Potential impact to outlying areas of system, but most areas around city of Hamilton are open and not at risk. Potential damage to WWTP from wildfire along river, as well as storage tank on outskirts of city.	Thu, 6/21/07 9:40 AM
 Find	2. high impact with more and more people living in the interface	Mon, 6/11/07 12:49 PM
 Find	3. With warmer years and less snowpack, and a build up of fuels from years of preventative management tactics, we could have some very serious forest fires. With an increase in affluent migrants from other parts of the country building homes on the wildland/urban interface and without much knowledge of Rocky Mountain ecological processes, the elements are in place for serious conflict between fire and people.	Thu, 6/7/07 8:20 AM
 Find	4. more people, homes & businesses encroaching into wooded areas without proper protective measures increases the risk of damage caused by wildfire	Wed, 6/6/07 8:19 AM
 Find	5. high	Mon, 6/4/07 8:02 AM
 Find	6. Potential is high here and with more folks in the interface, more likely to have losses.	Wed, 5/30/07 1:17 PM
 Find	7. encroachment of forest interface =more evac/protection plans	Wed, 5/30/07 11:19 AM
 Find	8. Extreme Impacts with increased population base moving next to forest boundary in WUI areas	Thu, 5/24/07 12:19 PM
 Find	9. Very large increase in exposure	Thu, 5/24/07 10:58 AM
 Find	10. tremendous impact	Thu, 5/24/07 9:41 AM
 Find	11. more people moving to the woods	Thu, 5/24/07 7:36 AM
 Find	12. increased as homes encroach upon wild	Thu, 5/24/07 4:23 AM
 Find	13. Increase	Wed, 5/23/07 3:47 PM
 Find	14. Significant growth is taking place in the wildland urban interface which is a significant hazard in the valley. Zoning is necessary to reduce the risks of this risky development.	Wed, 5/23/07 3:04 PM
 Find	15. Risk increases as development continues in interface areas.	Wed, 5/23/07 2:57 PM
 Find	16. If no efforts are made to require defensible space and fuel reduction/thinning doesn't occur then we will continue to experience the same	Wed, 5/23/07 1:49 PM
		25 responses per page 

District 1 On-Line Survey-Impact of Future Development on Hazardous Material Incidents

close window

















Displaying 1 - 15 of 15 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. Impact to distribution system for water and storm drainage, plus agricultural water district ditches	Thu, 6/21/07 9:40 AM
 Find	2. increased traffic and population will play a role	Mon, 6/11/07 12:49 PM
 Find	3. I think this depends on the fluxuation of the amount of hazardous material transported to or through Missoula and the amount of future development along these corridors	Thu, 6/7/07 8:20 AM
 Find	4. several railroads run through Missoula county and carry a myraid of hazardous materials.	Wed, 6/6/07 8:19 AM
 Find	5. low	Mon, 6/4/07 8:02 AM
 Find	6. More people, more chances of exposure,	Wed, 5/30/07 1:17 PM
 Find	7. increased traffic potential for more occurences	Wed, 5/30/07 11:19 AM
 Find	8. Slight increase	Thu, 5/24/07 10:58 AM
 Find	9. more people to protect	Thu, 5/24/07 9:41 AM
 Find	10. keeps going up	Thu, 5/24/07 7:36 AM
 Find	11. already high in urban areas and along rr tracks	Thu, 5/24/07 4:23 AM
 Find	12. Increase	Wed, 5/23/07 3:47 PM
 Find	13. The Rocky Mountain Lab and Glaxo Smith Kline facilities are situated in relatively high density area and are concerningly close to the floodplain.	Wed, 5/23/07 3:04 PM
 Find	14. Impact will increase as population densities increase	Wed, 5/23/07 2:57 PM
 Find	15. More development/people means more chemicals and opportunities for exposure	Wed, 5/23/07 1:49 PM
		25 responses per page 

District 1 On-Line Survey-Impact of Future Development on Flooding

[close window](#)


















Displaying 1 - 16 of 16 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. Low chance of flooding in Biteroot, possible impact to WWTP, but low probability	Thu, 6/21/07 9:40 AM
 Find	2. not much impact	Mon, 6/11/07 12:49 PM
 Find	3. As long as development continues to be restricted along floodplain areas, this shouldn't be a huge issue. Our main concern is losing a bridge that may strand a community like Hamilton	Thu, 6/7/07 8:20 AM
 Find	4. more people, homes & businesses within the 100 year flood plain increases opportunity for life & property loss	Wed, 6/6/07 8:19 AM
 Find	5. high	Mon, 6/4/07 8:02 AM
 Find	6. Pretty low here - need to stay out of the flood plain	Wed, 5/30/07 1:17 PM
 Find	7. require more resources	Wed, 5/30/07 11:19 AM
 Find	8. Possible loss of bridges connecting small rural community with larger areas - Missoula and Hamilton	Thu, 5/24/07 12:19 PM
 Find	9. Significant increase in exposure	Thu, 5/24/07 10:58 AM
 Find	10. more damage to life and property	Thu, 5/24/07 9:41 AM
 Find	11. people building in low lying areas	Thu, 5/24/07 7:36 AM
 Find	12. ncreased with additional development in flood plains	Thu, 5/24/07 4:23 AM
 Find	13. No Change	Wed, 5/23/07 3:47 PM
 Find	14. Uncontrolled development in floodplains and dam inundation areas will critically disrupt routine activities and could result in many casualties.	Wed, 5/23/07 3:04 PM
 Find	15. Risk will increase as more structures are built in flood prone areas.	Wed, 5/23/07 2:57 PM
 Find	16. More people living near the water means more damage from floods and dam failure	Wed, 5/23/07 1:49 PM
		25 responses per page 

District 1 On-Line Survey-Impact of Future Development on Severe Winter Weather

[close window](#)
















Displaying 1 - 14 of 14 responses

<< Prev

Next >>

Jump To: 1

Go >>

Comment Text		Response Date
 Find	1. Impacts to WWTP likely if storm is severe. Extreme low temperatures could affect lift stations, pumps, and distribution lines, plus possible power outages.	Thu, 6/21/07 9:40 AM
 Find	2. May become less prevalent in the valleys with global warming	Fri, 6/15/07 9:31 AM
 Find	3. no impact	Mon, 6/11/07 12:49 PM
 Find	4. While our climate is warming, the capacity for more intense winter storms is also there. It seems as though these storms are mainly dropping snowfall at elevations above the Missoula valley floor, climate seems unpredictable at this juncture. With our limited highway system in Montana, if I-90 is impassable to Alberton, those Mineral County population centers could be stranded.	Thu, 6/7/07 8:20 AM
 Find	5. medium	Mon, 6/4/07 8:02 AM
 Find	6. Not a big problem here - more winter users might make for more problems.	Wed, 5/30/07 1:17 PM
 Find	7. more recreationist in danger zones/ increase SAR responses	Wed, 5/30/07 11:19 AM
 Find	8. Can have impacts with loss of power and no backup heat or food sources available.	Thu, 5/24/07 12:19 PM
 Find	9. Some increased risk	Thu, 5/24/07 10:58 AM
 Find	10. will effect more people	Thu, 5/24/07 9:41 AM
 Find	11. globe warming will change this	Thu, 5/24/07 7:36 AM
 Find	12. No Change	Wed, 5/23/07 3:47 PM
 Find	13. Impact will increase with new construction and expansion of infrastructure to new developments.	Wed, 5/23/07 2:57 PM
 Find	14. Big enough storms will drive the weak of heart back home.	Wed, 5/23/07 1:49 PM
		25 responses per page 

**2007 UPDATE TO THE STATE OF MONTANA
MULTI-HAZARD MITIGATION PLAN AND
STATEWIDE HAZARD ASSESSMENT**

Mitigation Projects

LOCAL MITIGATION PROJECTS

DES DISTRICT 1

GOAL 1 - Maximize the use of mitigation actions that prevent losses from all hazards.

OBJECTIVE 1.1 - Increase readiness for the protection of life and property during an event.

Deer Lodge County

Medium Priority

- Install generators to maintain water services and waste water treatment.
- Designate a location for the Anaconda-Deer Lodge Emergency Operations Center.

Flathead Reservation

High Priority

- Provide training to first responders.
- Recruit EMT volunteers through public outreach.

Granite County

Medium Priority

- Develop evacuation plans for the communities.

Lake County

High Priority

- Recruit EMT volunteers through public outreach.
- Provide training to first responders.

Mineral County

Low Priority

- Provide generators for essential facilities to ensure operations during power disruption.
- Develop program for affected communities/vulnerable populations to acquire generators during power failures.
- Mapping and location of potential egress routes from communities during disasters.

Missoula County

Medium Priority

- Install weather stations on Deer Mountain and Point 118 (completed).

Powell County

High Priority

- Provide back-up power generation for Powell County Sheriff's Office and County Jail.
- Upgrade back-up power generation for the Powell County Hospital and Nursing Home.

Ravalli County

Medium Priority

- Assess countywide ingress/egress conflicts related to hazard responsiveness and evacuations.

Sanders County

High Priority

- Provide training to first responders.
- Recruit EMT volunteers through public outreach.
- Install/construct an EOC

OBJECTIVE 1.2 - Enable every citizen in Montana to receive critical warning information immediately no matter where he/she is.

Deer Lodge County

Medium Priority

- Put NOAA Weather Radios in critical facilities and schools.

Flathead Reservation

High Priority

- Enhance NOAA broadcasts to include Reservation boundary.
- Move antennae's, towers and repeaters from Oliver Point to Jette Hill for year-round accessibility.
- Provide weather radios for various critical facilities.
- Install or construct an EOC.

LOCAL MITIGATION PROJECTS

DES DISTRICT 1

GOAL 1 - Maximize the use of mitigation actions that prevent losses from all hazards.

OBJECTIVE 1.2 - Enable every citizen in Montana to receive critical warning information immediately no matter where he/she is.

Granite County

Medium Priority

- Put NOAA Weather Radios in critical facilities and schools.
- Place a NOAA Weather Radio Transmitter in Philipsburg.

Lake County

High Priority

- Provide weather radios for various critical facilities.
- Install/construct an EOC.
- Move antennas, towers and repeaters from Oliver Point to Jette Hill for year-round accessibility.
- Enhance NOAA broadcasts to include county boundary.

Mineral County

Low Priority

- Additional cell towers to improve cellular communication.
- Evaluation of possible communications systems that can effectively reach all portions of the County.

Missoula County

High Priority

- Implement reverse 911 capabilities.

Medium Priority

- Upgrade EAS System for all hazard warning/communication by installing EAS encoder/decoder in 911 dispatch (in progress).
- Implement enhance 911 capabilities (completed).
- Install NOAA weather radios in public buildings and other appropriate locations.

Ravalli County

Medium Priority

- Implement reverse 911 and enhanced 911 capabilities.
- Upgrade EAS System for all hazard warning/communication by installing EAS encoder/decoder in 911 dispatch.

Sanders County

High Priority

- Provide weather radios for various critical facilities.
- Enhance NOAA broadcasts to include County boundary.

Silver Bow County

Medium Priority

- Put NOAA Weather Radios in the schools.
- Create a dedicated phone system for parent information on school evacuations.

OBJECTIVE 1.3 - Increase the public awareness of hazards.

Mineral County

Low Priority

- Education on safe egress from communities during disasters.
- Information about the potential hazards that can affect the community.

Missoula County

Medium Priority

- National Weather Service to provide weather education presentations and tours to educate the public on weather hazards.
- Targeted education and information to public officials on fuel mitigation and general hazard mitigation.

LOCAL MITIGATION PROJECTS

DES DISTRICT 1

GOAL 1 - Maximize the use of mitigation actions that prevent losses from all hazards.

OBJECTIVE 1.3 - Increase the public awareness of hazards.

Ravalli County

Medium Priority

- National Weather Service to provide weather education presentations and tours to educate the public on weather hazards.

OBJECTIVE 1.4 - Continuously improve hazard assessments and the associated evaluation of vulnerabilities from all hazards.

Deer Lodge County

Medium Priority

- Develop GIS data that can be used with FEMA's HAZUS loss estimated models.
- Train Anaconda-Deer Lodge County Department heads and engineers in hazard mitigation.

Granite County

Medium Priority

- Develop GIS data that can be used with FEMA's HAZUS loss estimation models.

Mineral County

Low Priority

- Mapping and locations of each residence within the County.
- Mapping locations of all residences within the County.

Missoula County

Medium Priority

- Assess model regulations in other counties to ensure hazard mitigation is continuous and ongoing.

GOAL 3 - Reduce the community impacts of wildland and rangeland fires.

OBJECTIVE 3.1 - Enhance firefighting resources and improve firefighting capabilities.

Deer Lodge County

Medium Priority

- Develop dry hydrant water supplies in wildland/urban interface areas.
- Upgrade hydrants in the east end of Anaconda.

Flathead Reservation

High Priority

- Provide additional training to fire fighters.

Granite County

Medium Priority

- Develop dry hydrant water supplies in the Georgetown Lake area.

Lake County

High Priority

- Provide additional training to fire fighters.
- Obtain 26-30 foot all-hazard boat with fire fighting unit capable of rescue evacuation for Flathead Lake/Island residents.

Lincoln County

High Priority

- Identify areas with high number of fire starts and inadequate suppression equipment.
- Provide for shared database between fire suppression agencies on road closures, water sources, fuel ratings, district boundaries, ignition hazards and railroads.
- Develop water storage capability and water supply sites to enhance fire-fighting capability.
- Improve fire agency infrastructure (training facility; additional fire equipment storage; enhanced communications systems).

LOCAL MITIGATION PROJECTS

DES DISTRICT 1

GOAL 3 - Reduce the community impacts of wildland and rangeland fires.

OBJECTIVE 3.1 - Enhance firefighting resources and improve firefighting capabilities.

Powell County

Medium Priority

- Construct an additional 15 dry fire hydrants in the County.

Sanders County

High Priority

- Provide additional training to fire fighters.

Silver Bow County

Medium Priority

- Promote sprinkler system installation in older commercial structures.

OBJECTIVE 3.2 - Reduce fuels in the wildland urban interface (WUI), rangeland and communities.

Deer Lodge County

Medium Priority

- Promote sprinkler installations in older commercial structures.
- Encourage homeowners to reduce fuels around structures and create a fire defensible space.

Granite County

Medium Priority

- Encourage homeowners to reduce fuels around structures and create a fire defensible space.
- Reduce fuels in the Maxville Highway 1 corridor.

Lincoln County

High Priority

- Institute fuel control activities, such as thinning and fire breaks, particularly near more highly populated areas.
- Support alternative methods to burning when reducing fuel hazards, such as chipping and harvest.
- Institute weed control measures (mowing) around towns.

Mineral County

High Priority

- Implement fuel mitigation projects as designated in the Community Fire Plan.
- Encourage/support fuel mitigation projects in federal lands.

Medium Priority

- Encourage/provide financial incentive for fuel reduction around homes.

Missoula County

High Priority

- Fuel mitigation projects throughout the County identified in Community Fire Plan.

Medium Priority

- Encourage fuel reduction around homes in Wildland Residential Interface.
- Encourage/support fuel mitigation projects in federal lands near Wildland Residential Interface areas.
- Develop guidance/rules for maintaining defensible space around existing structures in Wildlife Residential Interface.

Ravalli County

High Priority

- Complete fuel mitigation projects as identified and prioritized in the Community Fire Plan.

Medium Priority

- Develop guidance/rules for maintaining defensible space around existing structures in Wildland Urban Interface.

Silver Bow County

Medium Priority

- Promote USFS fuels reduction in the Basin Creek watershed.
- Expand existing hazard fuels reduction programs to other wildland-urban interface areas.

LOCAL MITIGATION PROJECTS

DES DISTRICT 1

GOAL 3 - Reduce the community impacts of wildland and rangeland fires.

OBJECTIVE 3.3 - Enhance community awareness of wildfires through education.

Flathead Reservation

High Priority

- Formulate community awareness projects that instill Firewise practices.

Lake County

High Priority

- Formulate community awareness projects that instill Firewise practices.

Lincoln County

High Priority

- Educate landowners about alternatives to burning slash such as chipping or community dump.
- Promote "fire wide" education efforts in communities and schools.

Mineral County

Medium Priority

- Provide/prepare educational material to inform public about wildfire risks.

Sanders County

High Priority

- Formulate community awareness projects that instill Firewise practices.

OBJECTIVE 3.4 - Accurately assess and address the current wildland urban interface problems at the subdivision level.

Deer Lodge County

Medium Priority

- Adopt the Uniform Fire Code for the wildland/urban interface areas.
- Revise subdivision regulations with a better focus on defensible space/maintenance requirements in the wildland/urban interface.

Flathead Reservation

High Priority

- Work with federal, state and groups studying effects on wildfire at urban interface.

Granite County

Medium Priority

- Revise subdivision regulations with a better focus on defensible space/maintenance requirements in the wildland/urban interface.
- Conduct individual WUI wildfire assessments.

Lake County

High Priority

- Work with federal, state and groups studying effects on wildfire at urban interface.

Missoula County

Medium Priority

- Revise subdivision regulations to require sufficient fire suppression water supplies for subdivisions in Wildlife Residential Interface.

Powell County

Medium Priority

- Participate with the BLM to provide cost-share funds to residents to fire proof their homes.

Ravalli County

Medium Priority

- Revise subdivision regulations to require sufficient fire suppression water supplies for subdivisions in Wildland Urban Interface.

Sanders County

High Priority

- Work with federal, state and groups studying effects on wildfire at urban interface.

LOCAL MITIGATION PROJECTS

DES DISTRICT 1

GOAL 3 - Reduce the community impacts of wildland and rangeland fires.

OBJECTIVE 3.5 - Enhance effectiveness of response and evacuation.

Flathead Reservation

High Priority

- Obtain 26-30 foot all-hazard boat with fire fighting unit capable of rescue evacuation for Flathead Lake/island residents.
- Provide egress/ingress to roads land-locked in event of wildfire.

Granite County

Medium Priority

- Improve ingress/egress options in existing subdivisions.

Lake County

High Priority

- Provide egress/ingress to roads land-locked in event of wildfire.

Lincoln County

High Priority

- Use enhance 911 inventory to identify residences and critical infrastructure.

Mineral County

High Priority

- Develop safe ingress/egress routes for homes in the WUI.

Medium Priority

- Encourage greater initial response and active night time fighting of wildland fires.
- Training of local officials to effectively coordinate evacuation.

Sanders County

High Priority

- Provide egress/ingress to roads land-locked in event of wildfire.

OBJECTIVE 3.6 - Establish mapping or record keeping practices to support fuel management strategies.

Mineral County

Medium Priority

- Map/locate structures in wildland/urban interface.

Missoula County

Medium Priority

- Identify/map areas with heavy fuels near populated areas.
- Promulgate ordinances/resolutions requiring that structures be geo-referenced.
- Promulgate ordinances/resolutions requiring addresses for all new parcels created through subdivision or other means.
- Promulgate ordinances/resolutions requiring addresses for all existing parcels.
- Map/locate structures in wildland/residential interface.

Powell County

Medium Priority

- Realign fire district boundaries so the entire County is covered by a Fire District.

Silver Bow County

Medium Priority

- Support the Butte Fire Protection Association in expanding a wildland fire management committee consisting of Silver Bow, state and federal departments with a wildland-urban interface to coordinate planning, training, prevention and suppression.

LOCAL MITIGATION PROJECTS

DES DISTRICT 1

GOAL 5 - Mitigate the potential loss of life and property from flooding.

OBJECTIVE 5.1 - Provide adequate warning of flooding events.

Flathead Reservation

High Priority

- Institute communications system with local radio stations informing land owners of seasonal floods.

Lake County

High Priority

- Institute communications system with local radio stations informing land owners of seasonal floods.

Mineral County

Medium Priority

- Training of local officials to effectively coordinate evacuations.

Missoula County

Medium Priority

- Encourage use of NOAA weather radios to residences in hazardous areas subject to flooding or mudslides (completed).
- Install river gauge with telemetry below east fork of Rock Creek to notify downstream communities of flood surges.

Ravalli County

Medium Priority

- Install siren warning systems in campgrounds below Painted Rocks and Como Lake.
- Install river gauge with telemetry above and below Painted Rocks and Lake Como to identify potential breach/flood surge.

Sanders County

High Priority

- Institute communications system with local radio stations informing land owners of seasonal floods.

OBJECTIVE 5.2 - Reduce the number of current and future structures in the floodplain.

Missoula County

High Priority

- Adopt regulations enforcing no-build zones in floodplains and flood prone zones.

Medium Priority

- Require floodplain modeling for all subdivisions in unmapped drainages.
- Revise subdivision regulations to assess groundwater flooding potential.

Ravalli County

Medium Priority

- Modify subdivision regulations to require floodplain modeling for all new subdivisions in unmapped drainages.

Silver Bow County

Medium Priority

- Educate builders on building specifications and floodplain building requirements.

OBJECTIVE 5.3 - Prevent flooding of structures and infrastructure.

Deer Lodge County

Medium Priority

- Install storm drains in areas where they are lacking in the west end of Anaconda.
- Mitigate damages to critical facilities in the 100-year floodplain.
- Prevent flood contamination of well houses serving the Anaconda public water system.
- Install culverts and raise roadbed on North Fork Road off the Big Hole Highway from Bacon's Home Ranch to the county line.
- Relocate and upgrade culverts on Morrel Road from the Old Opportunity landfill to Gas City Road.
- Install backflow prevention systems from the Anaconda waste water facility.
- Upgrade and maintain storm drains from Fourth Street to the smelter.

LOCAL MITIGATION PROJECTS

DES DISTRICT 1

GOAL 5 - Mitigate the potential loss of life and property from flooding.

OBJECTIVE 5.3 - Prevent flooding of structures and infrastructure.

Deer Lodge County

Medium Priority

- Replace bridge in Galen.
- Clear debris from around old bridges.

Flathead Reservation

Medium Priority

- Replace deteriorated bridges on Little Bitterroot, Jocko, Flathead River and Boulder Creek to withstand heavy rain/melting snow.

Granite County

Medium Priority

- Increase the capacity of the downtown Philipsburg storm drain for Camp Creek to prevent Broadway Street flooding.
- Increase the capacity of the Sansome Street culvert in Philipsburg on Frost Creek.
- Increase the capacity of the culvert under Highway 10A in Drummond.

Lake County

Medium Priority

- Replace deteriorated bridges on Little Bitterroot, Jocko, Flathead River and Boulder Creek to withstand heavy rain/melting snow.

Lincoln County

Medium Priority

- Complete engineering evaluation of additional flood control measures within 100-year flood plain in Libby and other identified flood prone areas.
- Improve roads and road drainage to withstand flood flows in selected areas.
- Evaluate bridges and culverts at risk from flooding and develop schedule and funding to replace or upgrade as necessary.

Mineral County

Medium Priority

- Ensure water supplies are protected from bacterial contamination after flooding events.
- Debris removal from culverts in developed areas.

Low Priority

- Build community sewer systems for subdivisions with septic systems located in the 100 year floodplain.

Missoula County

High Priority

- Construction of Grant Creek Flood Control and Restoration Project.

Medium Priority

- Improve dike system along the Clark Fork River near 3rd and Tower Street.
- Assess feasibility of explosives for breaking up ice jams.
- Identify critical access bridges and evaluate potential for damage from debris.
- Require all floodplain modeling projects to analyze February/March runoff and spring runoff event.
- Complete structural analysis of bridges in County that have a low scour potential index.

Powell County

High Priority

- Replace two bridges on Cottonwood Creek with structures having a capacity of 950 CFS.
- Facilitate funding for the State of Montana to replace the Main Street bridge.
- Expand particular portions of the Cottonwood Creek channel to accommodate a flow of 950 cfs.
- Acquire 6-8 structures to accommodate the Cottonwood Creek channel expansion.
- Construct a flood channel around the City of Deer Lodge to accommodate 200-250 cfs of flood flow.
- Construct a debris basin and water control structure to route the appropriate amount of flood water down Cottonwood Creek and down the flood channel around the City of Deer Lodge.

LOCAL MITIGATION PROJECTS

DES DISTRICT 1

GOAL 5 - Mitigate the potential loss of life and property from flooding.

OBJECTIVE 5.3 - Prevent flooding of structures and infrastructure.

Powell County

Medium Priority

- Reconstruct East Side Road and install adequate cross drain structures.
- Reshape and provide drainage structures on Bismark Hill Road to prevent water from running down the road and cause flooding along Taylor Creek.
- Replace nine County bridges which have a hydraulic sufficiency rating of 4 or less.

Ravalli County

High Priority

- Complete floodplain/flood prone area delineation on all urban/developed streams.
- Identify critical access bridges and evaluate potential for damage from debris.

Medium Priority

- Revise subdivision regulations to assess groundwater flooding potential.
- Revise probably maximum flood projections for Painted Rocks and Lake Como based on enhanced digital elevation models and improved flood modeling software.
- Complete structural analysis of bridges in County that have a low scour potential index.
- Require all floodplain modeling projects to analyze February/March runoff and spring runoff events.

Silver Bow County

Medium Priority

- Increase stormwater systems in poor drainage areas.
- Install culverts in areas where water runoff is needed.

OBJECTIVE 5.5 - Improve the effectiveness of the flood insurance programs.

Deer Lodge County

Medium Priority

- Educate the public on flood insurance.

Flathead Reservation

High Priority

- GPS homes along Flathead and Little Bitterroot rivers.

Granite County

Medium Priority

- Educate the public on flood insurance.

Lake County

High Priority

- GPS homes along Flathead and Little Bitterroot River.

Lincoln County

Medium Priority

- Obtain and disseminate revised flood plain mapping to increase knowledge of flood prone areas.

Mineral County

Medium Priority

- More detailed floodplain delineation in areas of frequent flooding (St. Regis).

Sanders County

High Priority

- GPS homes along Flathead and Clark Fork River.

Silver Bow County

Medium Priority

- Educate the public on flood insurance.

LOCAL MITIGATION PROJECTS

DES DISTRICT 1

GOAL 5 - Mitigate the potential loss of life and property from flooding.

OBJECTIVE 5.6 - Reduce the risk of dam or levee failure.

Deer Lodge County

Medium Priority

- Implement security measures at the dams.

Missoula County

Medium Priority

- Improve the dike system along the Bitterroot River near Lolo.

GOAL 6 - Reduce impacts from severe winter weather.

OBJECTIVE 6.1 - Increase community capabilities to mitigate winter weather hazards.

Deer Lodge County

Medium Priority

- Become a National Weather Service Storm Ready County.
- Develop a sheltering plan specifically for utility outages.
- Install generators at elder care facilities.

Flathead Reservation

Medium Priority

- Provide emergency generators to hospitals, EOC, jail, rest homes and Tribal Health.

Granite County

Medium Priority

- Become a National Weather Service Storm Ready Community.
- Install generators at critical facilities, especially the Sheriff's office/911 center.
- Develop a sheltering plan specifically for utility outages.
- Encourage the electric companies to improve maintenance of and around power lines and substations.

Lake County

Medium Priority

- Provide emergency generators to hospitals, EOC, jail, rest homes.

Mineral County

Medium Priority

- Install additional early warning weather stations to predict hazardous weather conditions.

Missoula County

Medium Priority

- Install road sensors in key urban roads to identify freezing/dangerous road conditions.
- Identify public buildings by building type that may be susceptible to structural failures from heavy snow loads.
- Install webcams in key locations on urban roads to facilitate real-time identification of hazardous road conditions.

Ravalli County

Medium Priority

- Identify public buildings by building type that may be susceptible to structural failures from heavy snow loads.

Sanders County

Medium Priority

- Provide emergency generators to hospitals, EOC, jail and rest homes.

Silver Bow County

Medium Priority

- Work with special needs populations on alternative heating systems.
- Coordinate with volunteer agencies on sheltering in difficult weather conditions.
- Develop disaster supply kits for special needs facilities.

LOCAL MITIGATION PROJECTS

DES DISTRICT 1

GOAL 6 - Reduce impacts from severe winter weather.

OBJECTIVE 6.2 - Increase public awareness of winter weather hazards.

Mineral County

Medium Priority

- Develop educational materials regarding snow loads on roofs and safe removal.

GOAL 7 - Reduce impacts from severe summer weather.

OBJECTIVE 7.2 - Increase public awareness of ways to mitigate summer weather hazards.

Missoula County

Medium Priority

- Disseminate information to public on reducing property damage from high winds.

Ravalli County

Medium Priority

- Disseminate information to public on reducing property damage from high winds.

GOAL 8 - Reduce losses from hazardous material incidents.

OBJECTIVE 8.1 - Provide education, training on haz-mat incidents and response.

Deer Lodge County

Medium Priority

- Establish a back emergency exit from Montana State Hospital.

Flathead Reservation

Medium Priority

- Provide HAZMAT training and software to emergency managers.

Lake County

Medium Priority

- Provide HAZMAT training and software to emergency managers.

Lincoln County

Low Priority

- Improve training of first responders.
- Improve emergency communications network throughout the county.

Mineral County

Low Priority

- Conduct training exercises for hazardous material spills from both railroad and highway transport.

Sanders County

Medium Priority

- Provide HAZMAT training and software to emergency managers.

Silver Bow County

High Priority

- Educate teachers and school staff in schools near hazardous materials facilities and transportation routes in how to limit exposure to hazardous materials to students during an incident.

OBJECTIVE 8.2 - Identify and secure hazardous materials locations and transporters.

Deer Lodge County

Medium Priority

- Protect the exposed natural gas lines near Warm Springs.

Flathead Reservation

High Priority

- Replace 1939 vintage pumping plant on Flathead River.
- Secure bulk petroleum and propane tanks with fencing.

LOCAL MITIGATION PROJECTS

DES DISTRICT 1

GOAL 8 - Reduce losses from hazardous material incidents.

OBJECTIVE 8.2 - Identify and secure hazardous materials locations and transporters.

Flathead Reservation

Medium Priority

- Recontour Skyline Drive and provide new guard rail.
- Work with neighboring counties to discontinue dumping tires on Tribal land.
- Install fencing and alarm system at water treatment plant and water supply wells.

Granite County

Medium Priority

- Place highway barriers along Interstate 90 in Drummond.

Lake County

High Priority

- Secure bulk petroleum and propane tanks with fencing.

Medium Priority

- Recontour Skyline Drive and provide new guard rail.

Mineral County

Low Priority

- Improve 25 mph railroad curves near Superior.
- Examine high accident rates on Interstate 90 and work with MDT to reduce the hazards causing truck accidents and hazardous material spills.
- Ensure fixed facilities have toxic release plans that identify hazards and potential exposed areas in the event of a release.
- Obtain regular reports from MRL on the hazardous material flow through the County.

Powell County

Low Priority

- Monitor the hauling of contaminated sediments through Powell County.
- Provide adequate and legal egress for residents of Elliston & Garrison should a train derailment block their escape routes.

Sanders County

High Priority

- Secure bulk petroleum and propane tanks with fencing.

Medium Priority

- Install fencing and alarm system at water treatment plant and water supply wells.
- Work with CSKT to discontinue dumping tires on county land.

OBJECTIVE 8.3 - Support hazardous materials regulations and agreements.

Mineral County

Medium Priority

- Cooperative agreements with MRL and County to ensure rail lines are effectively inspected and maintained.

GOAL 9 - Reduce potential earthquake losses in seismically prone areas.

OBJECTIVE 9.2 - Educate the public in earthquake mitigation and readiness.

Deer Lodge County

Medium Priority

- Conduct earthquake drills in schools.

Granite County

Medium Priority

- Conduct earthquake drills in the schools.

LOCAL MITIGATION PROJECTS

DES DISTRICT 1

GOAL 9 - Reduce potential earthquake losses in seismically prone areas.

OBJECTIVE 9.2 - Educate the public in earthquake mitigation and readiness.

Silver Bow County

Medium Priority

- Educational awareness for students on earthquake safety.
- Educational awareness for the general public on the earthquake hazard.
- In-depth fault study and digital mapping.
- Create policies for where structures can and cannot be built based on the hazard information.

OBJECTIVE 9.3 - Seismically retrofit existing critical facilities/infrastructure and government assets.

Deer Lodge County

Medium Priority

- Retrofit critical government facilities for earthquakes.
- Educate home and business owners on simple earthquake retrofits.
- Survey commercial structures for earthquake stability and recommend retrofits.

Granite County

Medium Priority

- Retrofit critical government facilities for earthquakes.
- Educate home and business owners on simple earthquake retrofits.
- Survey commercial structures for earthquake stability and recommend retrofits.

OBJECTIVE 9.4 - Implement non-structural mitigation projects to harden State and community assets and infrastructure from seismic hazards.

Deer Lodge County

Medium Priority

- Tie down/secure objects in schools that could fall during an earthquake.
- Seismically stabilize large glass panes in Dwyer Primary School and Anaconda High School.
- Inspect key bridges for seismic stability.

Granite County

Medium Priority

- Inspect key bridges for seismic stability.
- Tie down/secure objects in schools that could fall during an earthquake.

Silver Bow County

Medium Priority

- Using shatter-proofing techniques, strengthen windows in schools.
- Tie down/secure objects in schools that could fall during an earthquake.

GOAL 10 - Reduce the likelihood of communicable disease outbreaks.

OBJECTIVE 10.1 - Reduce losses associated with a human health emergency.

Deer Lodge County

Medium Priority

- Educate public on communicable disease.

Flathead Reservation

Medium Priority

- Investigate mitigation options for West Nile Virus.

Granite County

Medium Priority

- Create a public education communicable disease prevention program.

Lake County

Medium Priority

- Investigate mitigation options for West Nile Virus.

LOCAL MITIGATION PROJECTS

DES DISTRICT 1

GOAL 10 - Reduce the likelihood of communicable disease outbreaks.

OBJECTIVE 10.1 - Reduce losses associated with a human health emergency.

Sanders County

Medium Priority

- Investigate mitigation options for West Nile Virus.

GOAL 11 - Encourage mitigation of potentially devastating but historically less frequent hazards.

OBJECTIVE 11.1 - Prevent losses from acts of terrorism, violence and civil unrest.

Lake County

High Priority

- Replace 1939 vintage pumping plant on Flathead River.

Medium Priority

- Install fencing and alarm system at water treatment plant and water supply wells.

Silver Bow County

Medium Priority

- Implement security systems in schools.
- Educate nursing home operators and residents on physical security.
- Implement security systems in hospitals.

OBJECTIVE 11.2 - Identify and reduce potential losses from landslides and avalanches.

Silver Bow County

Medium Priority

- Create a landslide/avalanche technical committee.
- Implement a recommendation system for development near landslide areas.

Low Priority

- Study potential landslide areas on and near private lands in more detail.